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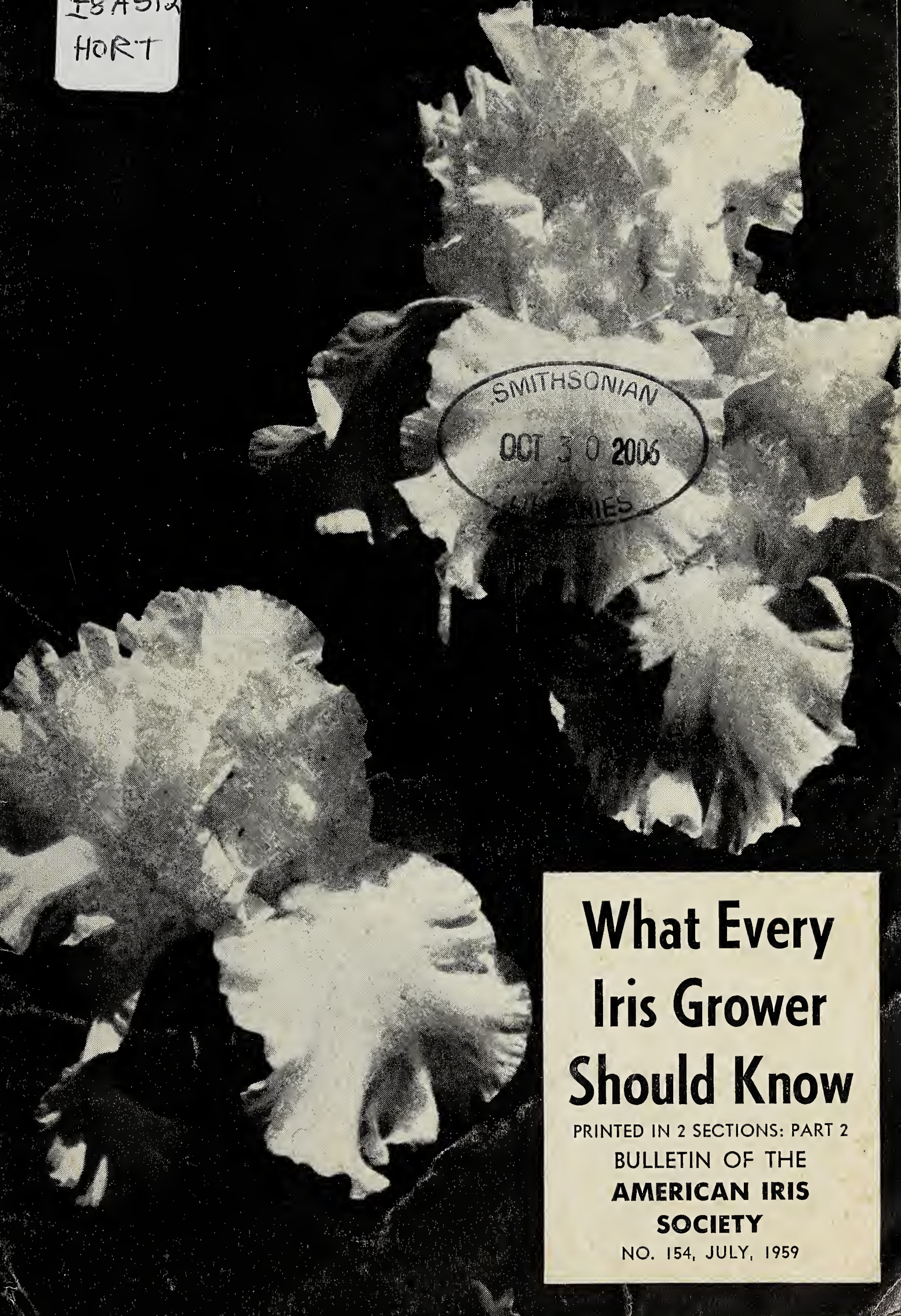

What Every Iris Grower Should Know

PRINTED IN 2 SECTIONS: PART 2

BULLETIN OF THE
AMERICAN IRIS SOCIETY

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THE BULLETIN

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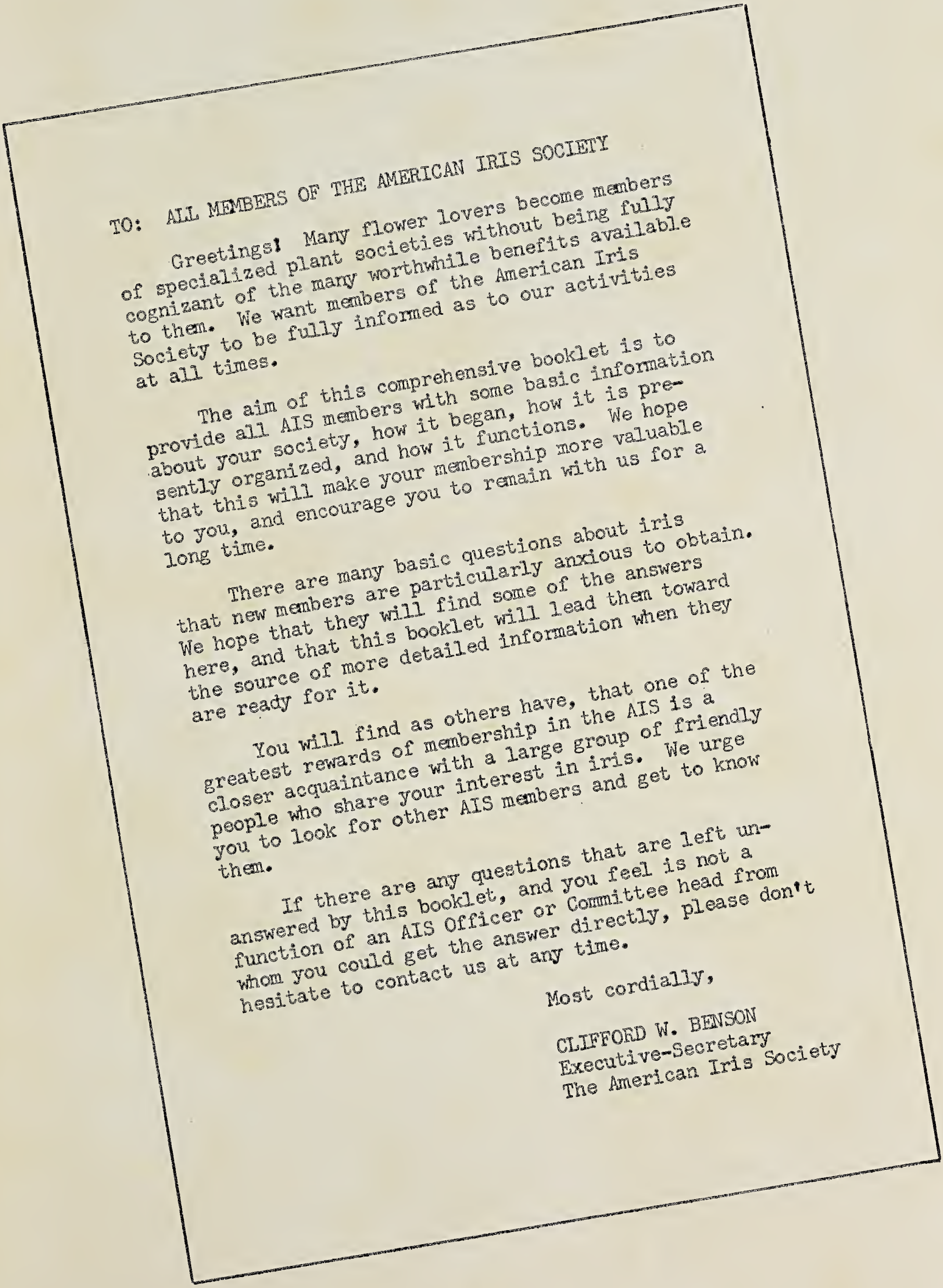
FRONTISPIECE:

Henry Shaw (C. W. Benson '59)—a ruffled white self

Welcome! Welcome to the American Iris Society



TO: ALL MEMBERS OF THE AMERICAN IRIS SOCIETY

Greetings! Many flower lovers become members of specialized plant societies without being fully cognizant of the many worthwhile benefits available to them. We want members of the American Iris Society to be fully informed as to our activities at all times.

The aim of this comprehensive booklet is to provide all AIS members with some basic information about your society, how it began, how it is presently organized, and how it functions. We hope that this will make your membership more valuable to you, and encourage you to remain with us for a long time.

There are many basic questions about iris that new members are particularly anxious to obtain. We hope that they will find some of the answers here, and that this booklet will lead them toward the source of more detailed information when they are ready for it.

You will find as others have, that one of the greatest rewards of membership in the AIS is a closer acquaintance with a large group of friendly people who share your interest in iris. We urge you to look for other AIS members and get to know them.

If there are any questions that are left unanswered by this booklet, and you feel is not a function of an AIS Officer or Committee head from whom you could get the answer directly, please don't hesitate to contact us at any time.

Most cordially,

CLIFFORD W. BENSON
Executive-Secretary
The American Iris Society

A SHORT HISTORY

Harold W. Knowlton

The American Iris Society was organized at a meeting at the New York Botanical Gardens on January 29, 1920, attended by seventy persons. The first officers were Mr. John C. Wister, President; Mr. William A. Peterson, Vice-President; Mr. Robert S. Sturtevant, Secretary; and Mr. Frank H. Presby, Treasurer. Six directors and six Regional Vice-Presidents were elected. Two years later, 1922, the British Iris Society (then called The Iris Society) was formed and the two societies have worked side by side ever since. At the end of the first year the Society had 459 members and $214.83 in the bank. In 1927 the Society was incorporated as a non-profit organization under the laws of Pennsylvania. The purpose of the Society is "to promote the culture and improvement of the Iris." The number of directors was increased to twelve and the number of Regional Vice-Presidents to fifteen. By that year the membership had grown to over 1100. During the war years the membership was at a standstill, but then began the steep rise to the present total of over 5,200 members. Dues were $3.00 a year until 1949 when the three-step rise to our present $5.00 fee was necessitated by rising costs. With increased numbers the expenses of the society have increased until our present budget is over $28,000.

The society has had eight presidents, whose names and terms of office are:

Mr. John C. Wister	1920-1934
Dr. H. H. Everett	1935-1939
Mr. W. J. McKee	1940-1942
Mr. Jesse E. Wills	1943-1946
Dr. Franklin Cook	1947-1948
Mr. Guy Rogers	1949-1952
Mr. Harold W. Knowlton	1953-1955
Mr. Marion R. Walker	1956-

There have been thirteen vice-presidents, seven secretaries and seven treasurers of the society. Our quarterly Bulletins have been published throughout the years, the January 1959 issue being number 152. There have been five editors: R. S. Sturtevant, B. Y. Morrison, F. W. Cassebeer, Sam Y. Caldwell, and Geddes Douglas. We have had only four registrars: Charles E. Gerstorff, Robert E. Allen, Mrs. George D. Robinson, and Mrs. Walter Colquitt. There are now twenty-four regions, each presided over by a Regional Vice-President.

In 1922 (Bulletin No. 8) was published the first check list of iris

OF YOUR SOCIETY

varieties, and a system of registration was started which has cleared up the confusion and duplication of names which existed. This system has been continued ever since. The voluminous check list of 1929, and the revision in 1939 with its 19,000 names, was the work of Ethel Anson S. Peckham, which gives us a record which is almost unique in the field of floriculture. A compilation of the Registrar's reports for the next ten years was published in 1949. A codification to include the years 1940 to 1959 is in progress. The Society has recently agreed to act as International Registration Authority for all irises other than bulbous irises, thus hoping to assemble all varietal names under one list.

Awards to outstanding varieties appear in the earliest Bulletins and have developed into the present system based on irises registered and introduced, and selected by a large group of judges from plants seen growing in gardens. Accompanying these awards is the Symposium. Started in 1920 and meeting with much opposition, it was resuscitated 19 years ago, and has now developed into an annual popularity poll of 100 favorite irises, which is printed widely in horticultural publications and is a source of publicity in the iris cause.

At one time, the magazine *Flower Grower* conducted a few Round Robins, wherein persons interested in iris circulated letters among themselves under the guidance of a director sponsored by the magazine. This idea was abandoned after a short while but has recently been revived by the AIS. As this is written in 1959, there are more than fifteen hundred members participating in the Robin Program under the direction of Mr. John Bartholomew, organizer of the program.

The AIS has sponsored two books on irises. The first was *The Iris an Ideal Hardy Perennial,* which was edited by the Bulletin Staff and published in 1947 and in 1949. The second book on irises, published in 1959, *Garden Irises,* was edited by Dr. L. F. Randolph of Cornell University, who spent more than two years assembling its comprehensive coverage.

New classifications of iris and iris colors have been necessitated by the steady advancements of form and the new colors that have been produced.

Iris exhibitions are held each year in increasing numbers. Each year we have more local iris societies, many affiliated with the American Iris Society. These groups and the specialized societies such as the Spuria Iris Society, the Dwarf Iris Society, the Median Iris Society, the Society for Louisiana Irises, and the Aril Society, International, show the increased interest in the development of this flower. In January, 1960 the AIS will be forty years old and is starting the next decade as an active and vigorous society.

HOW AIS OPERATES TODAY

Marion R. Walker

The basic policies upon which the Society operates are established by a Board of Directors consisting of not more than fourteen members of the Society, of whom twelve are elected by the membership for three-year terms, a class of four being elected annually. The other two members of the Board are the Secretary, and the Editor who are Ex-officio members of the Board with full voting power.

Members of the Board serve without compensation, and must be able to devote considerable of their time and money to the work of the Society. The only people who receive compensation for their work are those who comprise the Secretarial and Editorial Staff.

Each fall the Board nominates four candidates for election to its body. These candidates are chosen after careful consideration of the geographical location and the ability of the person to serve. Nominations for these Annual vacancies on the Board are transmitted to the entire membership by letter. Any member or group of members has the right to nominate additional names for the positions to be open. The By-Laws indicate that any 25 members, of whom not more than 12 may be located in any one Region, may nominate a Director and thereafter an election is required so that the membership may select the four persons they wish to serve them during the following three-year term.

There are two meetings of the Board of Directors each year; the regular Annual Board of Directors Meeting in the late fall, when election of new officers is held, and the Interim Meeting which is held at the time and place of the Annual Meeting of the entire Society. At the time of the Annual Meeting of the Society, the Regional Vice-Presidents or Board of Counselors meet with the Board of Directors. These Regional Vice-Presidents are the link between the Board and the membership of the Society. They are given the opportunity to express their opinions regarding the operation of the Society and often make constructive suggestions which are placed in operation by the Board of Directors at this joint meeting. Through this channel the membership has direct contact with the Board at all times, and many policies are established from original ideas suggested by an individual member.

The activities of the society are numerous. Most of them are led by committees whose chairmen often also serve as members of the Board of Directors. The functions and accomplishments of these committees will be explained elsewhere, but it is important to know that we have groups working on Awards, Exhibitions, Registration, Publications, Membership, Finance, Color Classification, and other areas as the need arises.

A number of the leading scientists of our nation are members of the Society and they are serving as members of the Scientific Committee which has contributed much to our knowledge concerning the iris genus.

Each member of the AIS has an opportunity to participate in an important program of the Society by joining a "Robin." Many wonderful contacts are made through this activity and each new member should avail himself of this chance to make new iris friends.

The Society belongs to the members. Each member will receive from it just what he returns in participation. It is our hope that you will all receive much.

National Activities of Your Society

These are the immediate and tangible things which your membership fee buys for you. They are the affairs in which all members have an active interest.

THE BULLETIN

The official publication of the Society is known as "The Bulletin" and is published quarterly. Within its pages one may find articles devoted to a fourfold purpose;

1. To make permanent the records of the Society, i.e., Awards, proceedings, personalities, Registrations, etc.
2. To promote the culture of, and interest in, all types and kinds of iris.
3. To record articles of Scientific interest and importance.
4. To make available through varietal comment, the description of all current varieties, and the performance records of these varieties.

The Bulletin welcomes contributions from its readers, which should be typewritten, double-spaced, and sent to the Editor. Criticisms and suggestions of a constructive nature are published regularly in a special section entitled "Our Members Write."

THE COMMITTEES

Inside the front cover of any AIS Bulletin you will find the names and addresses of all AIS Committee Chairmen. The activities of some of the more important ones are described in the following pages by their current chairmen.

THE AWARDS COMMITTEE

The Awards Committee, acting for the Board of Directors, administers the awards system of the Society. This system has many phases, among which are the appointment of the Accredited Garden Judges, the establishment of eligibility for the awards, preparation of the Awards and Symposium Ballots, receiving and tabulating the ballots of the Judges, publishing the results, and issuing the Awards Certificates.

EXHIBITION COMMITTEE

The Exhibition Committee is the service organization for clubs that sponsor iris shows or that sponsor iris sections in flower shows. The American Iris Society Awards are available to any show that follows the rules of the Society for iris shows. These rules are simple and easy to follow.

The Exhibition Committee, for the convenience of show chairmen, carries a list of show supplies which are furnished at cost. These include rosettes for the Best Specimen of the Show, rosettes for the Artistic Sweepstakes, rosettes for the best of a division, award cards and ribbons, entry tags, secretarys' sheets, seedling certificates, and two booklets, "Rules and Regulations Governing All Shows and Exhibitions," and "Information Handbook for Exhibition Judges."

The top award, the Silver Medal or Certificate, is awarded to the exhibitor winning the most first place points in a show following AIS rules; and the second award goes to the exhibitor winning the second most first place points. A Bronze Medal or Certificate also is given to an exhibitor showing an outstanding commercial or educational exhibit.

The Color Classification Committee works as a sub-committee of the Exhibition Committee with the Registrar, and classifies iris by show and color class; it publishes a rather comprehensive list of irises by color class. This publication saves classification chairmen at shows a great deal of time, and is for sale by the Exhibition Committee.

MEMBERSHIP COMMITTEE

Your Membership Committee is charged with the responsibility of building the Society's membership and in this connection works closely with the various Regional and Area membership chairmen over the country. Members are the blood stream of an organization and without them, the organization cannot exist. Each of you can be of great assistance in building our membership, for there is hardly a member who does not know of at least one prospective new member. If you do not feel at liberty to ask them to join the American Iris Society, just pass their name or names on to your area membership chairman. In the event you are not acquainted with your area chairman, send the names on in to the National Committee and they will take over from there.

A number of Bulletins are being returned undelivered because of improper address. Whenever you change your address, be sure to notify Mr. Cliff Benson, 2237 Tower Grove Blvd., St. Louis 10, Missouri, immediately of the change in address so you will be sure to receive your Bulletins promptly.

PHOTOGRAPHIC COMMITTEE

The Photographic Committee has responsibility for maintaining an up-to-date library of photographs and colored slides for the Society.

It maintains several excellent sets of color slides for rental. One set

MARY RANDALL, (Fay 1951) won the Dykes Medal in 1954. This self of deep, blended, "raspberry" rose, has won acclaim wherever grown. The standards are arched and touching, the falls semi-flaring. The edges of both standards and falls show a tendency towards the new laced effect so popular in modern bearded iris.

BUTTERSCOTCH KISS (Plough 1957) is the epitome of the new fad for lace. Both the standards and the falls of this seedling from (Cascade Splendor x Honeyflow) x Twenty Grand, are heavily laced. It is a wide-hafted flower of blended tan and yellow.

is made up of a variety of iris such as Dutch, Siberian, Louisiana, Japanese, Douglasiana, and Spuria. The other sets are of Tall Bearded iris, showing many of the recent award winners and top favorites, as well as selected garden shots.

Each set contains approximately 100 slides, 35 mm. size, and rents for $5.00. A numbered list giving the names of the iris accompanies each set. Checks are to be payable to The American Iris Society and mailed to Albert G. Lauck, Slides Chairman.

Request for slides should be made well in advance for proper scheduling, preferably 30 days. Give exact date desired, so that slides can be sent to reach you in advance of your meeting date. This will give you an opportunity to familiarize yourself with the iris in the set.

AIS slides are a great help in making selections of new iris for your garden, keeps you informed of the better and new varieties, and will create additional interest in your Iris Society or Garden Club.

REGISTRATION COMMITTEE

The Registration Committee, of which the Registrar is a member, has general oversight of the rules and regulations governing the registration of irises. It is a committee to whom should be referred questions of release of obsolete names and other matters concerning which the Registrar is in doubt. The usual work of registration is done by the Registrar, who records the registrations and makes the annual report. In its forty years the American Iris Society has had only four registrars: Mrs. Walter H. Colquitt, 487 Albany, Shreveport, Louisiana, is the present Registrar and Recorder of Introductions.

THE ROBINS COMMITTEE

To facilitate a more widespread acquaintanceship among the Society members, and in order that the subject of iris might be more freely discussed, the American Iris Society decided several years ago to adopt a Robin Program. Robins are correspondence groups of approximately ten members each, in which the letters continually travel in a circuit according to a prearranged route list. During each visit of the robin the member withdraws his previous letter and writes a new letter to the group. The Robin Program is divided into a number of Divisions, each covering a special type of iris interest, namely—Tall Bearded Iris, Hybridizing, Dwarf Iris, Japanese Iris, Table Iris, Remontants, Medians (general), Intermediates, Border Iris, Arils, Louisiana Iris, Standard Dwarf Bearded, Spurias, Species and Natives, Siberians, Iris Photography, Regional Robins, and International Robins.

Each member of the Society is cordially invited to join one or more of these robins. It may be done by simply mailing back the card that was sent out to each member at the time of joining the Society. If you didn't receive a card or it has been misplaced, please mail your request to the National Robin Director—John A. Bartholomew, 35 Pine

Grove Street, Milton 86, Massachusetts. Each member may join a robin in as many Divisions as he wishes, but it is suggested that unless one is familiar with robins, he limit his enrollment to two or three Divisions until he becomes familiar with the procedures and responsibilities of robin membership.

As is the case in most membership-participation ideas, the success of our Robin Program depends on a substantial number of people taking part in it. By participating you are not only giving yourself a great deal of added enjoyment, but are also helping the venture to be a success.

SCIENTIFIC COMMITTEE

The Scientific Committee functions to a large extent as a panel of trained experts who attempt to answer questions of a scientific nature which are put to it by American Iris Society members. Included on the committee are taxonomists, cytologists, geneticist and plant pathologists. In addition the Scientific Committee, in collaboration with the Executive Committee, administers such funds as become available for research investigations.

THE ANNUAL MEETING

A meeting of the entire Society is held each year at iris-blooming time, and the location of each meeting is selected with the aim of making it as convenient as possible for some large segment of the membership. Locations at which meetings have been held or are scheduled are: Boston, Chicago, Hamilton, Ontario (Canada), Kansas City, Los Angeles, Nashville, Newark, Oklahoma City, and Syracuse. Many members plan their annual vacations so that they can attend these meetings wherever held.

Awards of The American Iris Society

HIGH COMMENDATION

This is the first award a new iris can receive from the Judges. It is in the nature of a local "pat on the back." Each judge may nominate for this honor each year, not more than ten Tall Bearded varieties, and also not more than five varieties in each of the other classifications. They must be iris which have not been introduced to commerce. They must be either named or numbered varieties. An iris receiving five votes gets the award, which may be taken as a recommendation that the iris be considered for introduction, but is not a requirement of introduction.

HONORABLE MENTION

This, in the National sense, also is an award of encouragement. It is designed to bring national attention to worthy varieties. Each Judge may nominate for this honor each year, not more than fifteen Tall Bearded varieties, and also not more than five varieties in each of the other classifications. Varieties receiving a certain number of votes get the award. In the case of Tall Bearded iris including Oncocyclus, Regelia, or hybrids between them, they must receive a minimum of 12 votes. In the case of other types of iris, five votes suffice. All iris must have been duly registered and introduced to commerce to be eligible. Honorable Mention is a requisite for eligibility for Award of Merit, Caparne Award, Morgan Award, Mary Swords Debaillon Award, Eric Nies Award, Clarence G. White Memorial Award, Cook-Douglas Award, Judges Choice, and AIS Symposium.

AWARD OF MERIT

To receive the Award of Merit an iris must be highly esteemed. This award is not open to Dwarfs, Sibiricas, Louisianas, Spurias, or Arils, but there are awards of equal level for these specialized sections and you will find them on page 12. Each year the judges select their choice twelve from the eligible list, and the twelve varieties receiving the greatest number of votes get the Award of Merit. In the event of a tie for the twelfth position, the irises tied will all receive the award. These iris must have been officially registered and duly introduced and have received an Honorable Mention not less than two, nor more than five years prior to the current season. This is indeed an honor for the few iris selected from a long list of eligibles.

THE DYKES MEDAL

The highest honor an iris can receive. Each year the eligible list contains approximately 50 names. Each Judge votes for one iris. The iris receiving the greatest number of votes gets the award. In this country the iris must be of North American origin. The British Iris Society (which sponsors this award) likewise makes the award in England under parallel but slightly differing rules. To be eligible an iris must have received an Award of Merit, or the Caparne, Debaillon, Nies, Morgan, White Memorial, or Cook-Douglas Award not less than two nor more than five years prior to the current season, and be recommended by not less than fifteen per cent of the judges voting.

THE JUDGES CHOICE

This is a popularity poll of the newer Tall Bearded iris varieties, conducted among the Judges, immediately after the Awards ballots are tabulated. The eligibles are the Honorable Mention winners of the current year and preceding year. Its purpose is to select the twenty-five favorite new iris of the year. These are iris most likely to succeed to the higher awards.

THE SYMPOSIUM

This is a popularity poll, participated in by the entire membership. Its purpose is to select the 100 Favorite Iris of the Year. This list serves as a buying guide for gardeners all over the country. You will have an opportunity to participate in this voting each year. (See copy of latest symposium enclosed with this booklet.)

MORE ABOUT THE DYKES MEMORIAL MEDAL

This medal honors the memory of William R. Dykes (1877-1925) an English pioneer in iris culture, and author of the famous monograph *The Genus Iris.* It may be awarded annually to an English variety, a French variety, and an American variety, under rules established by the British Iris Society. There is no higher honor for an iris. From time to time there is published in the Bulletin a list of all varieties which have received the Dykes Medal. While you will later be interested in the English and French winners, your immediate interest as a new member is in the American varieties which are the following:

1927—San Francisco (Mohr, 1927)—blue plicata
1928—No award
1929—Dauntless (Connell, 1929)—dark red bitone

1930—No award
1931—No award
1932—Rameses (Hans Sass, 1929)—gold, pink, buff blend
1933—Coralie (Ayers, 1932)—light red blend
1934—No award
1935—Sierra Blue (Essig, 1932)—medium blue self
1936—Mary Geddes (Stahlman-Washington, 1931)—light red blend
1937—Missouri (Grinter, 1933)—medium blue self
1938—Copper Lustre (Kirland, 1934)—copper brown blend
1939—Rosy Wings (Gage, 1935)—dusty rose with copper sheen

1940—Wabash (Williamson, 1936)—blue-violet amoena
1941—The Red Douglas (J. Sass, 1937)—red-purple self
1942—Great Lakes (Cousins, 1938)—light blue self
1943—Prairie Sunset (H. Sass, 1939)—reddish buff blend
1944—Spun Gold (Glutzbeck, 1940)—yellow self
1945—Elmohr (Loomis, 1942)—purple self
1946—No award
1947—Chivalry (Wills, 1944)—medium blue self
1948—Ola Kala (J. Sass, 1943)—yellow self
1949—Helen McGregor (Graves, 1946)—light blue self

1950—Blue Rhythm (Whiting, 1945)—medium blue self
1951—Cherie (D. Hall, 1947)—tangerine-bearded pink self
1952—Argus Pheasant (DeForest, 1948)—golden brown blend
1953—Truly Yours (Fay, 1949)—yellow white bicolor
1954—Mary Randall (Fay, 1951)—bengal rose self
1955—Sable Night (P. Cook, 1952)—very dark approach to black
1956—First Violet (DeForest, 1952)—violet self
1957—Violet Harmony (Lowry, 1952)—violet self
1958—Blue Sapphire (Schreiner, 1953)—light blue self

OTHER NATIONAL AWARDS

The Award of Merit is open mainly to Tall Bearded iris, but there are other awards of equal rank which are available to iris varieties from other classifications which have received an Honorable Mention and which are recommended by at least seven judges.

THE CAPARNE AWARD

Named in honor of Mr. W. J. Caparne, an English iris breeder who, about 1900, did important work with dwarf and intermediate irises. This award is made each year to the Miniature Dwarf Bearded variety receiving the greatest number of votes from judges.

THE COOK-DOUGLAS AWARD

Named to honor Mr. Paul H. Cook and Mr. Geddes Douglas, American hybridizers who pioneered in the development and introduction to commerce of certain types of crosses between Dwarf species and Tall Bearded varieties which are classified as Standard Dwarf Bearded irises. This award is made each year to the Standard Dwarf Bearded variety receiving the greatest number of votes from judges. It is also equal to the Award of Merit.

THE MARY SWORDS DEBAILLON AWARD

Named to honor Mary S. Debaillon, who was instrumental in bringing about the preservation of many Louisiana iris species, and of intensifying interest in them and their hybrids. This award is made each year to the Louisiana Iris variety receiving the greatest number of votes from judges. It is also equal in rank to the Award of Merit.

THE MORGAN AWARD

Named to honor Mr. H. Cleveland Morgan, a Canadian hybridizer who did outstanding work with Sibirica iris species and their hybrids. This award is normally made each year to the Sibirica variety receiving the greatest number of votes of judges, and is equal in rank to the Award of Merit. This award is temporarily inactivated, due to an insufficient number of eligible varieties.

THE ERIC NIES AWARD

Named in honor of the work done with the Spuria iris species and hybrids by the late Mr. Eric Nies. This award is made each year to the Spuria variety receiving the greatest number of votes of judges. It ranks equally with the Award of Merit.

THE CLARENCE G. WHITE MEMORIAL AWARD

Named in honor of the pioneering work done with Aril iris by the late Mr. Clarence G. White of California. This award is made each year to the Aril or Arilbred variety receiving the greatest number of votes from judges and is equal to the Award of Merit.

THE FRANKLIN COOK MEMORIAL CUP

This cup is awarded annually "to the originator of the outstanding named variety of any duly introduced iris seen at the time of the Annual

Meeting, growing in any garden on the program, and judged by members of the AIS attending, to be the most meritorious iris seen at the meeting." This cup was formerly called the President's Cup, as it was originally donated by the late Dr. Franklin Cook while he was President of the AIS.

How The Accredited Judges Are Selected

There are two classes of judges in the Society: Exhibition Judges and Garden Judges. The Exhibition Judges judge irises entered in iris shows or iris sections of flower shows. The Garden Judges vote on awards just described, which is one of their primary duties, though they may also judge at shows. Exhibition Judges are appointed annually by the President, or by the Chairman of the Exhibition Committee, upon recommendations made by the Regional Vice-Presidents, and subject to approval of the Board of Directors. Appointments are made to the extent of approximately five per cent of the total membership of each Region. Garden Judges are appointed annually by the President or by the Chairman of the Awards Committee, upon the recommendations of the Regional Vice-Presidents, and subject to the approval of the Board of Directors. Appointments are made to the extent of ten per cent of the Regional membership. If you become ambitious to be a Judge, begin developing your qualifications. Enter actively into Regional Affairs; attend meetings and shows and acquire a broad knowledge of iris varieties old and new, through seeing them, comparing and appraising them, and reading about them in the AIS Bulletins and the book *Garden Irises* edited by Dr. L. F. Randolph of Cornell University.

Regional Activities

In the past the scope of Regional activities has been left largely to the individual Regional Vice-President, but this picture is rapidly changing. Most Regions now have Regional organizations complete with officers and committees who direct the Regional activities. Several publish their own Regional Bulletins or Newsletters, hold Regional Meetings from time to time, and are actually small individual iris societies within themselves. At first there were very few Regions in the Society, but as the membership increased, various areas were split off and made into new Regions. A list of the present Regions, together with the names and addresses of their Regional Vice-Presidents will be found inside the back cover of your AIS Bulletin. The membership of the individual Regions ranges from approximately 100 in the smallest to approximately 400 in the largest one.

If you will correspond with your Regional Vice-President and enter actively into the affairs of your Region, you will find your membership much more valuable and rewarding to you than if you simply sit back and do nothing. Never be afraid to write and ask questions. Iris people are friendly and your wishes and problems will find sympathetic attention.

Local Activities

Many members will not be able to enter into the National and Regional Activities of the Society except when they are nearby, but everyone can take part in local activities. These activities are usually started by a group of AIS members who live near enough to each other to maintain regular social contact and exchange information on irises. In some Regions these groups are organized into areas headed by an Area Chairman who also functions as an officer of the Regional organization. These areas often hold monthly or bi-monthly meetings during the winter and early Spring months, and garden meetings or tours during the blooming season. The winter meetings can catch up to what's new in iris by showings of Kodachrome Slides available from the Chairman of the Photographic Committee of the Society, or have talks or clinics on hybridizing or iris culture. In the Spring there are also many flower shows where iris are featured, or separate Iris Shows. In the summer, some areas hold auctions of surplus rhizomes, and have picnics in conjunction with them. We urge you to get to know the AIS members who live near you. You'll be amazed at the many friendships that develop from a common interest in irises.

Flower Shows

Many garden clubs already schedule iris classes in their spring flower shows, or will be glad to at your request. Some of the more active iris organizations also put on shows devoted exclusively to iris. These shows are attended by many people who do not know what modern iris look like, and they afford a wonderful opportunity to put newer varieties before the public, and tell others about the advantages of the American Iris Society. Iris shows should be staged under AIS rules because the show will then be eligible to receive the AIS awards, and will have the advantage of information and suitable supplies obtainable from the Chairman of the AIS Exhibition Committee (see name and address inside front cover of a recent AIS Bulletin). If you need any information write to him. Your inquiry will receive prompt and courteous attention.

The Genus Iris

The genus Iris is composed of at least 200 different species. It is beyond the scope of this booklet to cover them all, so only the more important ones will be described here. Broadly speaking there are two major types of iris as far as the root systems are concerned:

(1) The bulbous—in which the underground part consists of an actual bulb, not unlike a small tulip bulb in shape.

(2) The rhizomatous—in which the underground part consists of rhizomes with attached roots.

While there are a few important bulbous kinds, some of which are widely grown for the commercial florist trade, nearly all of our garden irises belong to the rhizomatous group. This part of the genus is so very large that it is further subdivided into two sections based on the characteristics of the flowers. Study the parts of the iris flowers shown on the next page. Note that the three upper petals are called "standards," while the three lower petals are called "falls." On the bearded iris there is always a fuzzy part near the upper center of the falls which we call the "beard." That's why we call them bearded iris. Many iris do not have this beard. The scientific name for bearded iris is "eupogons" or just plain "pogons." The beardless iris are called "apogons." The drawings on the next page bring out some of these differences. The Spanish iris-xiphium and the Juno irises belong to the bulbous family, while the crested iris-Evansia, and the Louisianas belong to the beardless group.

Though the beardless section of the iris genus is by far the largest, it is the bearded iris (particularly the Tall Bearded) that attract us the most. This is because they are more amenable to garden culture in a wide variety of situations and because they produce large and spectacular flowers.

The bearded iris have been classified by the American Iris Society into six major groups: Miniature Dwarfs, Standard Dwarfs, Intermediates, Miniature Tall Bearded, Border, and Standard Tall Bearded. Each of these will be discussed in a separate chapter later. There is another important group of iris that differ from the true bearded in that they have unicellular hairs and the seeds have unique white collars at one end called arils. This is where they get their name. The Oncocyclus and the Regelias which come from the dry lands of the middle east belong to this group. Though difficult to grow in some parts of the U.S., especially in those areas having excessive summer rains, these strange and beautiful iris are well worth the extra effort needed for success. They demand plenty of lime, hot dry summers, obtainable through special care, and exceptionally fine drainage. They are quite hardy.

Among the beardless iris the most important are the Japanese, the Siberian, the Spurias, and the Louisianas. There are also a few good native American species worth trying. Each of these will be discussed later in a separate section.

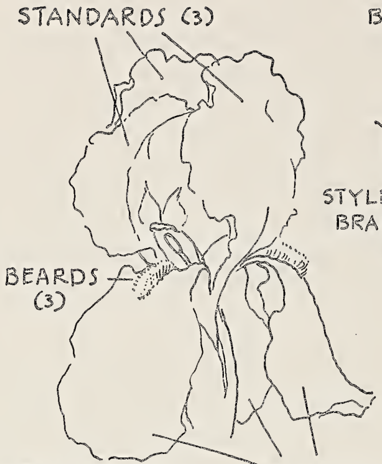
THE BULBOUS IRISES

There are three groups of bulbous irises: the reticulatas, the Junos, and the xiphiums which consist of Dutch, Spanish and English varieties.

Iris Reticulata & its Relatives

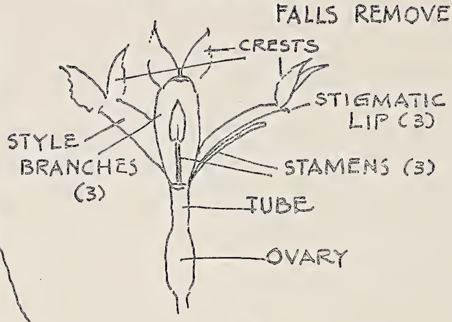
MARGARET EDWARDS

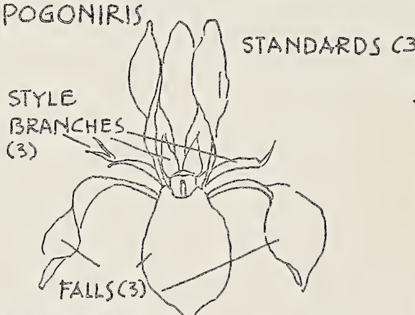
The little netted iris, the dwarfs of the bulbous group, bloom with and even before the crocus. Most are fairly hardy, at least through the eastern Great Lakes, through most of New England, and all the Pacific Coast. *Iris reticulata* itself, and its named varieties seem the hardiest. The species is a bluish violet with golden markings on the falls, about four inches tall, with flowers shaped like a miniature Dutch iris. Pleas-



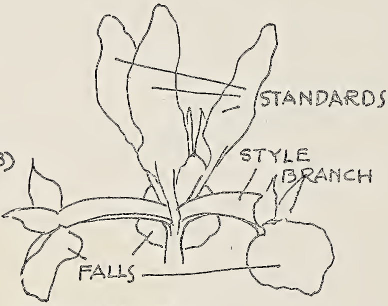
BEARDED IRIS
POGONIRIS

BEARDED IRIS FLOWER
WITH STANDARDS AND
FALLS REMOVED

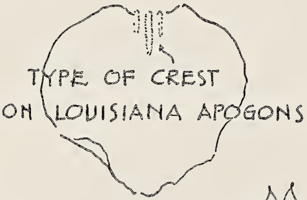




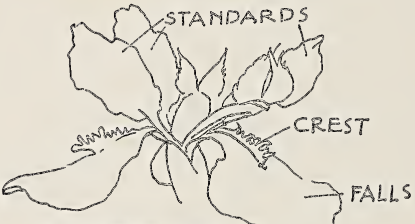
BEARDLESS IRIS
APOGON



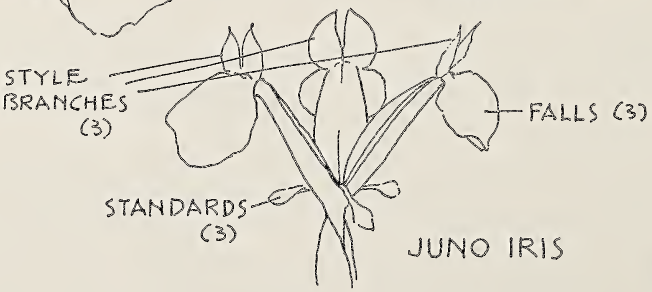
SPANISH IRIS
XIPHIUM



TYPE OF CREST
ON LOUISIANA APOGONS



CRESTED IRIS
EVANSIA



JUNO IRIS

antly fragrant, J.S. Dijt is a reddish purple and very handsome. Cantab is a pretty light blue, outstanding in the garden when it blooms. Hercules has a good bronze hue and tends to be a little larger than the others. There are several related species, equally charming. *I. danfordiae,* the yellow reticulata, blooms a little early and is not quite as hardy as reticulata itself. *I. histrioides* is earlier and larger, but its bright blue flowers, marked ultramarine are rather tender. *I. vartanii,* usually sold in the form of Vartani Alba, is a beautiful white and blooms very early and is quite hardy. In the Hudson valley of N.Y. it has bloomed in late January, or early February. *Iris histrio* is earlier and tender. In the colder parts of the country, this and *histrioides* are best grown in pots for indoor bloom, handled as you would potted crocus.

These iris are easy to grow outdoors if you have the right conditions. They like full sun, a mildly acid soil of good fertility, but not too rich. Where drainage is good they may be left in the ground, but if the summers are wet, it is best to dig them up when foliage is brown and store until fall in a dry place. Where they are happy they will increase. They are inexpensive enough to replace if they don't.

The Junos

Of the nine or ten Juno iris species, there are four that are of comparatively easy culture, though all require the same special treatment recommended for reticulatas. *Iris aucheri* is about 9 inches tall and has a light blue flower. *I. willmottiana* is a light violet-purple, slightly taller. *I. bucharica* is 15 inches high and has white flowers marked with yellow, while *I. magnifica* which is the most vigorous of the group has relatively large flowers of near white with a lavender cast. It is especially important when growing Junos to avoid transplanting as much as possible, being careful not to disturb the carrot-like storage roots attached to the lower side of the bulbs.

The Xiphiums

There are about three important species of xiphiums that are ancestors of the familiar Dutch iris. *I. tingitana,* a native species from Tangiers has bright blue flowers on 2-ft. stems. *I. filifolia,* a bright reddish violet from North Africa and Spain is shorter—about 12" to 14" in height. *I. juncea,* a good yellow self, also comes from this same area. It was from these principal species that the Dutch developed the familiar Dutch iris we often see at commercial florists' today. They make excellent cut flowers and generally have stems about 24" high. For best results these iris should be planted about 5 inches deep in well-drained soil, preferably in a sunny spot with some protection from the north. A light straw mulch is recommended in those areas which experience heavy snow in winter. They normally flower about the same time as the Tall Bearded. Colors range from blue to violet to white, orange, red, yellow and orange and brown. There are also many bicolors. The Spanish iris are similar but flower about two weeks later and the colors are not as varied. The last important bulbous group is the English iris which is believed to have come from wild species (possibly some other xiphium) imported from Spain many years ago. These flower in the latter part of June in most sections of the country and grow up to 18" tall. The color range runs from white to various shades of lavender or purple. These irises prefer a cool moist soil, so that they do not often thrive under the same conditions as the Dutch and Spanish varieties.

CULTURE OF THE BEARDED IRIS

William G. McGarvey

A majority of new irisarians will wish to grow one or more of the many types of bearded irises. All of these, except the Oncos and Regelias, require about the same kind of culture. All of them need sun, drainage, and food. Irises prefer full sun but will grow and bloom well if given half a day of sunlight. The bearded iris will not tolerate wet feet and the gardener can avoid many problems by providing good drainage.

Irises will grow in any good garden soil. If other plants make good growth in your garden, irises will flourish in it. But extra food is necessary for best growth and bloom. For the new planting a balanced chemical fertilizer can be dug into the soil at the rate of one ounce per square foot if this is done three weeks before the plants are set in. Half this amount should be used if it is added just before planting time. Large quantities of well-rotted compost or well-rotted manure are good additions but should be placed eight inches deep or dug into the soil and they should not be piled around the rhizome. It is good to combine the chemical fertilizer with the rotted materials and to dig both in together. In general, fertilizers high in nitrogen should be avoided.

Each spring, after growth begins, one handful of granulated super phosphate plus two handsful of agricultural gypsum can be sprinkled in a circle around each clump. A half ounce of balanced fertilizer may be substituted for the super phosphate. It is good to make these applications just before a rain, or to hose the plants clean of any fertilizer which has fallen on the new growth.

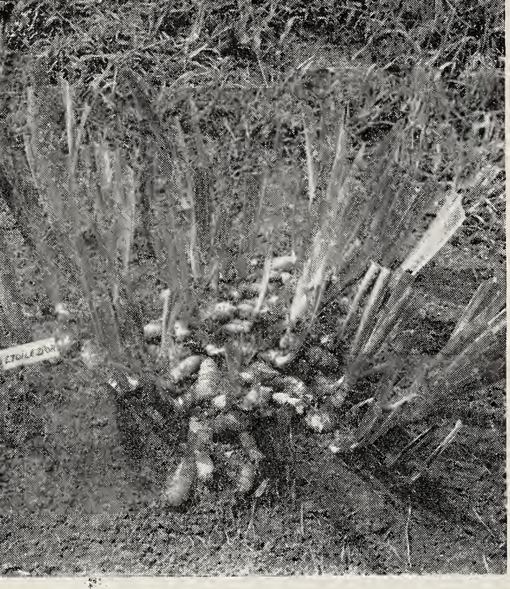
Like many perennial plants, irises may be moved at any time if proper care is taken. However, there is a best time to move them. This is during the dormant period which extends from soon after they bloom until the time when new root growth develops. It is for this reason that most dealers ship in July and August. If you move your irises within this period you will have the least trouble and the greatest success.

Just one word of caution about injury is necessary. Since disease may enter through open wounds it is better to trim foliage away with shears rather than to tear it away, and to cut rhizomes apart rather than to break them apart. Cut surfaces and injuries which do occur should be exposed to the sunlight for several hours before replanting. A light dusting of sulphur on such wounds is still further insurance against future troubles.

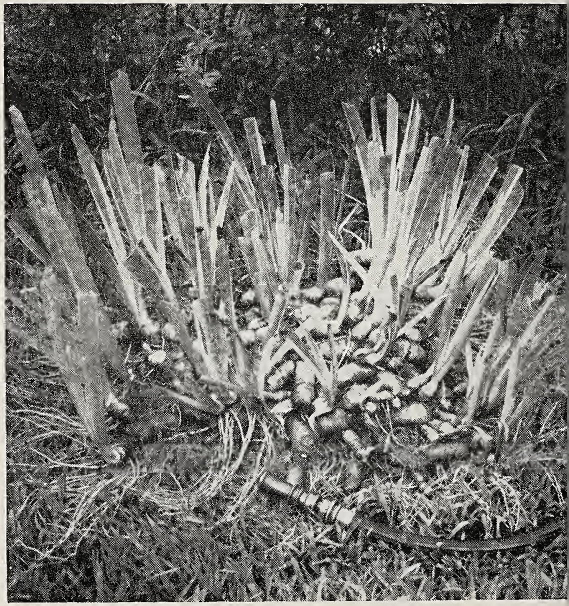
A LOVELY IRIS GARDEN

Although your bloom should be fairly good the year after transplanting, your best bloom will occur in the second to fourth years, so do not divide your clumps too soon. But after three or four years the rhizomes will become crowded and should be dug, divided, and replanted. This is also the time to revitalize your soil by adding humus and fertilizer as was recommended for the new planting. If the illustrated instructions found on pages (20) and (21) are followed you will be rewarded with more plants and much more bloom.

HOW TO DIVIDE AND



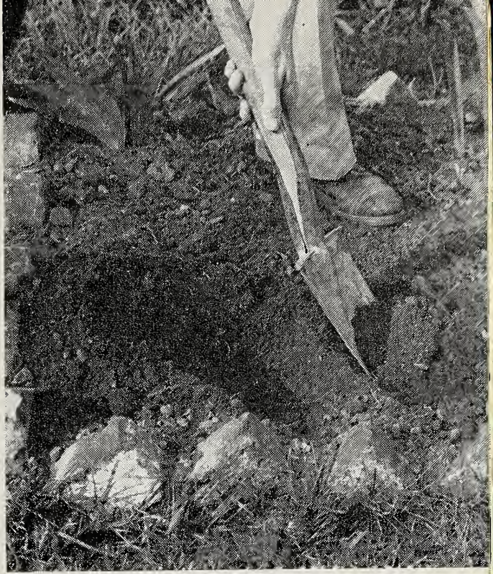
From a single rhizome planted five years previously, this clump developed, which is long overdue for dividing. Note that some rhizomes in the center of clump are growing on top of each other. Leaves have been cut back to show crowded effect.



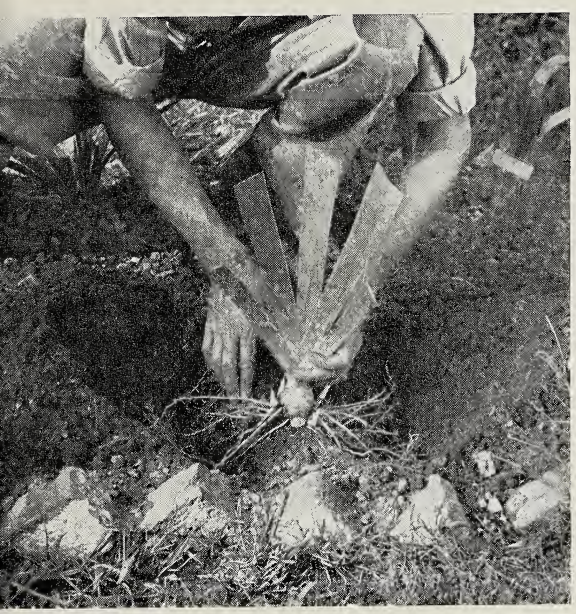
After being dug clump was cleaned with stream from hose. Note that the healthier growing rhizomes circle the clump, while those in the center have very few white feeding roots, thus bloom stalks will be in a circle around the clump, with very few or none in the center.

Healthy, growing rhizomes are separated from the old bloom stalks. Rhizomes are washed thoroughly before replanting. To avoid rot, expose newly cut surfaces to sun's rays for several hours, or coat these surfaces with light sulphur, captan, aresan or other bacterial preventative. Some prefer "double" rhizomes for replanting like the one in the foreground. The center rootstalk contains a reserve supply of food on which the active roots may draw.

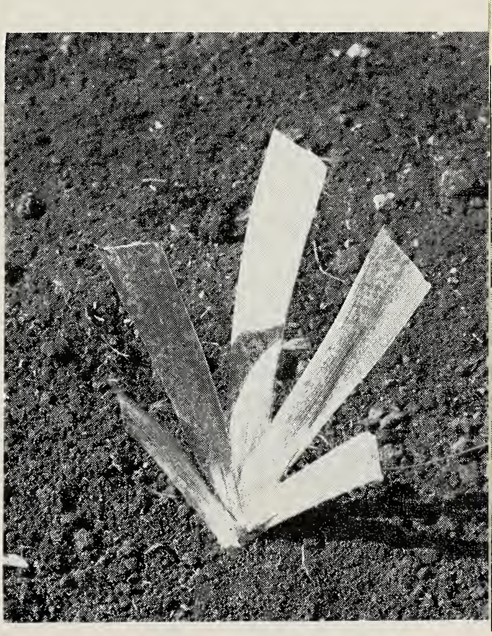
TRANSPLANT AN IRIS



Before planting a new bed of iris, dig in plant food and cultivate well at least two weeks before roots are set. This allows soil to settle. When ready to plant dig two slanting holes leaving a dividing ridge in center. This will eliminate an air pocket under the rhizome.



Place rhizome directly over center of ridge and spread feeding roots evenly to each side. Since ground underneath has not been disturbed no settling will occur. By spreading roots to either side the plant is securely anchored.



In heavy clay soil—plant on the surface, in light sandy soil—plant in the ground—beneath the surface about an inch down. Pull dirt in towards plant from either side. By pressing on top of root, proper planting depth may be regulated. Firm down well with foot and water thoroughly.

PESTS AND DISEASES

Dr. A. W. Dimock

Iris plants are remarkably hardy and in any given locality there are only a few pests and diseases which damage them. Serious troubles usually can be avoided by providing good soil drainage, by keeping the beds clean and free of weeds during the growing season, and by thoroughly cleaning up and burning all old plant refuse in the fall. In addition it is advisable—in some areas essential—to dust or spray the plants about once a week with a good general-purpose pesticide. Following are some of the specific problems which may be encountered.

Sclerotium Rot or Crown Rot

This disease develops under warm, moist, shady conditions. It attacks at the base, or crown, of the plant near the rhizome and the leaves fall over. Other rot organisms may enter through the diseased tissue and cause extensive damage, or even death, to the rhizome. The fungus may make a web-like growth on the soil at the base of the plant and produce tan or brown mustard seed-like structures which give it its common name, the mustard-seed fungus. *Control:* Clean up the plants and let in plenty of sunshine and air. Provide for good drainage *away* from the base of the plant. Drenching the bases of the plants with a preparation containing 1 level tablespoon of a new fungicide, Terraclor 75, in a gallon of water has provided good protection against Sclerotium rot.

Soft Rot

The rhizome turns soft and mushy and usually very foul smelling. The entire clump may be killed if the rot is not checked. The basteria which cause the rot are present in most soils, but only attack through injuries. Usually serious only under warm humid conditions. *Control:* Often can be checked by cutting off the affected "toe" or by scraping out the rotted tissue and drenching with a 1 to 1000 solution of bichloride of mercury (1 8-grain tablet to a pint of water) or a concentrated solution of potassium permanganate. Control of iris borers (see below) is important since rot bacteria may enter through borer injuries. Be sure that the plants receive plenty of ventilation and sunlight.

Botrytis Rot or Winter Rot

The rhizome is covered with an olive or black feltlike fungus growth. Little or no new spring growth develops and the plant dies. Roots and parts of the rhizome may be rotted. Serious in some areas. *Control:* remove all diseased "toes" and soak remaining divisions 5 to 10 minutes in calomel suspension (1 oz. calomel to 1 gallon water). Do not replant in infested soil unless it is first sterilized. Use only light mulches and remove them early.

Heterosporium Leaf Spot

Abundant, regular, tan-to-brown spots on leaves, causing them to look unsightly and die back prematurely. Rhizomes not attacked. Spores spread by splashed water. Very common in northeast and other rainy areas. *Control:* Remove all infected leaves and cut back green leaves below infections in the fall; burn this material. Spray or dust thoroughly with a zineb-containing mixture about once a week as long as active leaf growth continues. (The composition of pesticide sprays and dusts is always printed on the label).

Bacterial Leaf Blight

Irregular brown spots with watersoaked margins on leaves. Bacteria spread by splashed water. Sporadic in occurrence; serious only in wet seasons. *Control:* Remove and burn infected leaves.

Scorch

Leaves turn reddish brown and die back. Center leaves often affected first. Entire top growth may die down but rhizome not visibly affected. In late stages the fleshy parts of the roots rot, leaving only the central core and the outer sheath or "skin." *Control:* No definite control known. Affected plants sometimes "recover" when *all* old roots are removed and rhizome is thoroughly dried before replanting. Scorch is sporadic in occurrence, but may occasionally cause serious losses.

Iris Borer

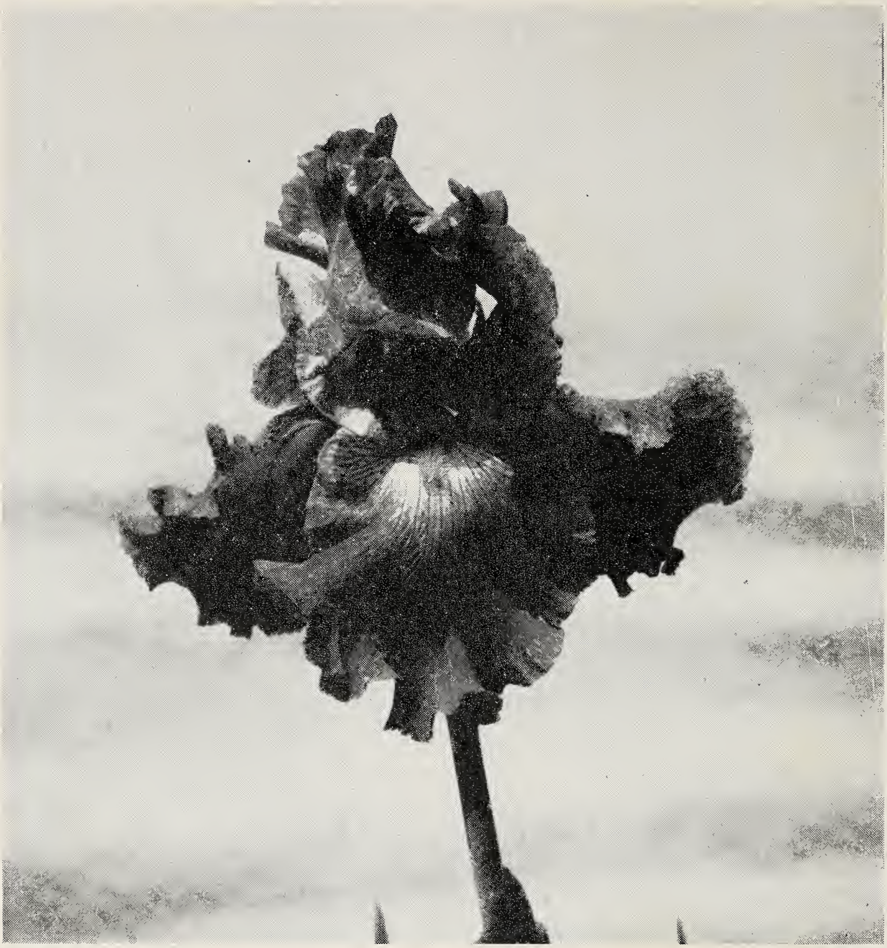
First appears as small holes and tunnels in leaves running down toward rhizome. Later, the borer may enter the rhizome, eating away much of the tissue and often providing entry for soft rot bacteria. Eggs laid in fall by the adult (a moth) in old iris refuse and in the soil near iris plants. *Control:* Remove and burn all old iris leaves and other debris in fall or *early spring* to reduce carry-over of eggs. Spray or dust foliage weekly in spring and early summer with mixture containing DDT, malathion and zineb (for fungus leaf spot).

Aphids

Occasionally present in large numbers, causing disfigurement of show stalks and loss of seed pods. Feed by sucking out the plant sap. *Control:* Malathion-containing pesticides usually will control aphids, but better results sometimes are obtained with lindane preparations. Sufficient detergent should be added to sprays to make them thoroughly wet the aphids.

Thrips

These insects may cause disfigurement of iris blossoms, particularly of Japanese iris, and also some russetting of the foliage. *Control:* Regular treatment with pesticides containing DDT and malathion should keep thrips from becoming troublesome.



Polka Time (Schortman) is characterized by extreme ruffling rather than "lace."

THE IRIS FAMILY

Because Tall Bearded iris are the most popular and widely grown of all irises, we will describe them and where they came from first. As you know from reading previous sections of this booklet, other types of iris are also worth trying in some parts of the country. We have therefore included separate articles by specialists in growing these other irises so that you can become more familiar with them.

THE TALL-BEARDED IRISES

Harold W. Knowlton

The Tall Bearded irises are classified as those over twenty-eight inches in height. They bloom generally after the dwarf and intermediate varieties and are the most popular of all garden irises. They have been in cultivation for a long period of time and until about 1900 were chiefly diploids of twenty-four chromosomes and medium height derived from crosses of two European species—*Iris pallida* in shades of lavender, blue, and purple; and *Iris variegata* with yellow standards and falls marked with dark red or maroon. About that time Sir Michael Foster in England crossed them with *Iris cypriana* and *mesopotamica,* which produced larger flowers with better branching and introduced the modern race of tetraploid irises usually having forty-eight chromosomes. The French firm of Vilmorin came forward with other tetraploids, notably Alcazar. About 1915, Bliss, an English breeder, raised the famous Dominion, which was of heavy substance and the forerunner of a long line of fine varieties. In this country Bertrand Farr, Grace Sturtevant, William Mohr, and the Sass Brothers were pioneers in the development of modern hybrids. Many of the finest productions of recent years were produced by the intercrossing and selection of seedlings from lines produced by these breeders. By this means Dr. Kleinsorge has produced his "brownish" blends and David Hall his "flamingo" pinks.

These newer and larger plants brought in strains that were less hardy than the older pallida-variegata crosses, and less adaptable to the varying climate of the United States. But constant intercrossing over the past thirty or more years, and the introduction of other species, have produced a race of Tall Bearded irises that do well under varying conditions and that have rich and clear colors; new colors in pink, apricot, orange, and yellow; good branching with sturdy stalks, heights up to forty-eight or more inches; and blooms that are ruffled, fluted or with crimped or laced edges. Domed standards and semi-flaring falls are esteemed by many, but there is no standard of perfection.

Tall bearded irises come in several patterns and are usually divided into five divisions—namely:

1. Self-flower all of one color. (may have beard of a different color)
2. Plicata or fancy-standards and falls white or light in color overlaced with stitching, veining or mottling of a darker color.
3. Bitone—all one color, but standards a different tint or shade from the falls.
4. Bicolor—standards one color and falls another color. Other terms often used for bicolors are
    - (a) amoena—standards white, falls another color, usually blue, purple or yellow,
    - (b) variegata—yellow standards and red or maroon falls.
5. Blend—two or more colors or tones which blend into each other.

Self-colored flowers have great “carrying” power in the garden and are extremely popular, particularly in the lighter tones. Clumps of pale yellows such as Amandine or Desert Song; blues like Blue Sapphire, Eleanor's Pride, and Lady Ilse; whites like Cliffs of Dover and Wedding Bouquet; pinks like Happy Birthday and June Meredith; intermingled with Violet Harmony, Truly Yours, Mary Randall, and Sable Night are some of the large number of fine varieties that might be used.

There is great interest in the “amoena” class—those with white standards—and hybridizers are striving to give us flowers with falls of pink, yellow, apricot, red, and other colors. They are not easy to produce and for many years Wabash with purple falls was the outstanding variety. More recently we have Pinnacle, with yellow falls, and the advance guard with other colors are now available. With the introduction of Whole Cloth we have an iris with gleaming white standards and light blue falls.

The race for a “black” iris continues with such things as Sable Night, Black Hills, and Deep Black. Argus Pheasant and Inca Chief highlight the newer “browns.” Another development is the iris with a white spot in the center of the falls surrounded by a yellow edge matching the yellow standards, such as Truly Yours, Humming Bird, Golden Anniversary, and Wedding Ring.

In plicatas are those with white ground and light stitching such as Caroline Jane and Rosy Veil; deeper edges as in Bellemeade; and the heavy deep-colored borders of Port Wine, Raspberry Ribbon, and Bazaar. A recent development is white irises with tangerine beards illustrated by Frost and Flame. Chantilly, Queen's Lace, and Butterscotch Kiss have a laced edge which is one of the newer breaks. Each year there are hundreds of new introductions which bring out new colors and new patterns.

IRIS COLOR CLASSIFICATION

J. Arthur and Irene S. Nelson

The AIS Color Classification Committee engages itself in developing a logical color-pattern classification of iris and color-reading them against standard color charts to make proper class placement of each iris, mainly as a help to iris show committees, but also in the hope that all iris will be registered with complete color symbols so that the Registrar can place each iris in its proper color class. At the present time the Committee lists 65 separate color-pattern classes. These are listed in the Report of Color Classification obtainable from the Chairman of the Exhibitions Committee. It contains a list of 1350 well-known irises listed alphabetically by class number.

For color-classification purposes, the Wilson Color Chart numbers 63, 64, and 1-7 are in the yellow range, 8-17 are orange, 18-28 are red, 29-37 are purple or violet, 38-51 are blue (actually this range includes some blue-violet numbers but are included in the blue class on the look-alike principle), and 52-62 complete the green range of the spectrum.

The symbol system is as follows:

W	White	1	Self	P	Pale
V	Violet	2	Plicata	L	Light
B	Blue	3	Bitone	F	Full
G	Green	4	Bicolor	D	Dark
Y	Yellow	5	Blend	DD	Very dark
O	Orange			H	Heavily marked
R	Red			L	Lightly marked
N	Black				

Thus Helen McKenzie, a white-white self, would be W1W; Snow Flurry, a cool white, would be W1B; while Snow Goddess, a warm white, would be W2Y. Rosy Veil, a lightly marked plicata violet on white, would be W2VL, while Port Wine, a heavily marked purple plicata on a warm white ground, would be W2VH. Sable, a dark purple self, would be V1D, while Black Hills, a very dark blue, would be B1DD. Happy Birthday, which is a pale orange self (orange diluted with white until it is a pale tint of orange—Wilson 412/3), is O1P, popularly called an orange pink. June Meredith, Wilson 420/3, is a pale tint of red, and is in the true pink or red-pink class, R1P. The third class of so-called pink in iris is the orchid pink, and is a tint of purple, symbolized by V1P.

We have chosen any iris with a reading of /3 following a main color in Wilson as the dividing line for pale. Thus 12/3 would be pale orange O1P, and any other tint as light or lighter, such as 612/2 to 412/3 would fall into this pale orange class. In like manner, for other colors. The /2 numbers following main color numbers are classed as light. Thus 40/2 would be light blue B1L, and Great Lakes, 640/1, falls into this class. The full numbers and the full numbers followed by a /1 are listed as full. Thus Ola Kala, 4, is Y1F, a full yellow; and Blue Rhythm, 40/1, is a full blue or B1F. The shades in Wilson are preceded by 7, 8, 9, and 10.

7 is the lightest of these and 10 is the darkest. Sable, Wilson 733, is a dark purple symbolized by V1D; and Violet Rhythm, 735 falls in the same class. Sable, 934, and Burnished Black, 937;1, would fall in the V1DD class.

There are no adequate colors in Wilson for the yellow, tan, and brown blends, and we have used three flowers for comparison purposes. Flowers similar to Buffawn have been placed in the YO5P class; flowers similar to Cascade Splendor have been placed in the YO5L class; and flowers similar to Bryce Canyon, Argus Pheasant, and Pretty Quadroon have been placed in the YO5D class.

Good examples of the classes that have been color read are as follows: white-white self, W1W, Helen McKenzie; cool white self, W1B or W1V, Snow Flurry; warm white self, W1Y, W1O, W1R, Snow Goddess or Sharkskin; white ground violet plicata lightly marked violet, Rosy Veil, W2VL; white ground plicata marked heavily purple, W2VH, Port Wine; white ground plicata marked blue, W2B, Blue Shimmer; white ground plicata marked red, W2R, Gay Border; white bitone, W3, Arctic Splendor; white standards and dark purple or violet falls, W4VD, Bright Hour; white standards and light blue or violet falls, W4VL or W4BL, Polar Cap; white standards and yellow falls, W4Y, Pinnacle; white standard and red falls, W4R, Finest Hour; pale violet, V1P, Crinkled Lilac; light violet or purple self, V1L, light violet or purple self, V1L, Dreamcastle, Lavenesque; full violet or purple self, V1F, Violet Harmony, First Violet, Elmohr; dark violet self, V1D, Sable; very dark violet or blue self; V1DD or B1DD, Black Hills; pale violet standards and dark violet falls, V3PD, Amigo; pale violet standards and light violet falls, V3PL, Maytime; full to dark violet standards and darker falls, V3FD, Nightfall; violet standards, other color falls, V4, Lady Mohr; pale violet blend, V5L, Chantilly; light violet blend, V5L, Pathfinder; full violet blend, V5F, Three Oaks; dark violet blend, V5D, Grand Canyon; B1P, Blue Sapphire, Eleanor's Pride; light blue self, B1L, Great Lakes; full blue self, B1F, Blue Rhythm, Chivalry, Pierre Menard. Blue bicolor, B4, Wide World, blue standards and white falls; pale yellow self, Y1P, Desert Song, Amandine; light yellow self, Y1L, Elsa Sass; full yellow self, Y1F, Ola Kala, Solid Gold; yellow ground plicata marked violet, Y2V, Tiffany; yellow ground plicata marked brown (dark orange), Y2), Surrender; yellow plicata marked red, Y2R, Cinnamon Toast; light yellow bitone, Y3L, Mystic Melody; full yellow bitone, Y3F, Rocket; yellow standards, white falls, Y4W, Starshine, Wedding Ring, Truly Yours; yellow standards, violet or purple falls, Extravaganza, Pretender; yellow standards, red falls, Y4R, Staten Island; pale yellow-orange blend, YO5P, Buffawn; light yellow-orange blend, YO5L, Cascade Splendor; dark yellow-orange blend; YO5D, Bryce Canyon, Argus Pheasant, Pretty Quadroon; orange pink self (pale orange), O1P, Happy Birthday, May Hall; pale red self, R1P, June Meredith; light red self, R1L, Melbreak, Rose Garland; dark red self, R1D, Fire Brigade, Ranger; very dark red self, R1DD, Solid Mahogany; red bitone, R3, Redcap.

Dwarf iris Path of Gold (Hodson)

DWARF BEARDED IRIS

Walter Welch

Dwarf bearded iris might properly be considered as of recent development, for although gardeners have always grown dwarfs for their early blooming in the spring garden, the older dwarfs were quite different from those of today.

The old variety Atroviolacea was the standard by which dwarfs were known, and the varieties of the Sass Bros., as Sound Money, Tony, and Rose Mist still exist today as typical of the older forms. The modern dwarfs have an extended season of bloom, an expanded range of colors and patterns, and have new and different forms and types of plants.

The older dwarfs were restricted in color range to purples and pale yellows with an occasional near-white form. The new dwarfs come in practically all colors and patterns known in the Tall Bearded iris.

Through the use of new and earlier-blooming species as *I. pumila* and *I. attica,* and the various hybrids, the season has been extended to approximately five weeks bloom, mostly in the earlier end of season.

In the past, most of the older varieties were of the chamaeiris type, that is, forms and derivatives of the species *I. chamaeiris,* which is the largest and the latest blooming of the dwarfs. To this we have added many new species and forms such as *I. pumila, I. attica, I. pseudopumila, I. mellita, I. bosniaca, I. rechenbachii, I. arenaria,* and a few others; the results of which through hybridization were a development of a wide assortment of sizes, seasons, types and variations of forms. They run from two up to about ten inches high, with numerous different plant characters, so that you may have a single color in pumila, in mellita, in chamaeiris, arenaria types, without one conflicting or duplicating the other.

In the dwarfs we can have a variety of beard colors on one color form. For example we have blacks with white, bronze, and deep violet beards. The purples and violets can have the full range of colors from white to deep violet, yellows and white. It is amazing how effective a contrasting beard color can be in an iris.

The spot pattern which is responsible for those types called amoenas, neglectas, variegatas, and Pinnacles, is a dominant factor in pumila, and along with pumila's wide color range of flowers, this one little species has inherent almost the equivalent of the whole group of species in the Tall Bearded class.

At the present time it is possible to obtain several forms of the species *I. pumila,* as some of them have been introduced under the names of Hanselmayer, Sulina, Nana, Carpathia, April Morn, Spring Joy, White Mite, Red Amethyst, and others that may be found listed in catalogues.

Perhaps a list of some of the representative varieties of the modern dwarfs may be of help in selecting your collection.

Sparkling Eyes—amoena, white standards, violet falls, white edge.
Ablaze—variegata, Std. yellow, F. reddish, edge yellow, orange bd.
Blue Frost—sky-blue self, white beard.
Cherry Spot—red amoena, Std. white, F. reddish, beard white.
Butterball—arenaria hybrid, light yellow.
Red Gem—red hybrid, dark beard, 7 inches.
Red Amethyst—reddish pumila, 4½ inches.
Black Baby—purple-black, chamaeiris type, 8 inches.
Little Joe—violet black, bronze beard, 5 inches.
Gay Lassie—Pinnacle, white stds., yellow F. white border.
Promise—arenaria hybrid, pinkish, yellow beard.
Buster Brown—arenaria hybrid, brown bitone, yellow beard.
White Elf—warm white, white beard, fine shape.
Bright White—pure white self, white beard, 7 inches.
Fashion Lady—bright yellow, orange beard, 8 inches.

The above is just a sample of some of the exciting new varieties which are available today. The Dwarf Iris Society Symposium lists fifty which are known as the 50 BEST DWARFS.

There are a few things about culture of the dwarfs that should be mentioned. The culture of dwarfs is quite similar to that for the Tall Bearded iris. The one important thing for success with dwarfs is to have good drainage. More dwarfs are lost through lack of proper drainage than any other cause. They also like sunshine but will perform nicely in half shade. It is significant that in the wild the pumilas grow on the south and east side of hills, seldom on the north and west sides.

There is a variation in the performance of different type dwarfs in different climates. For example in the Deep South the chamaeiris types seem to be best suited to their climates, with the pumilas giving a relatively poorer performance due to the lack of complete winter dormancy. The pumilas apparently require winter conditions to put them in shape for their best performance.

As to the uses of dwarf iris in the garden, they serve two specific purposes, one of which is to furnish early bloom when all flowers are scarce and when we need them so badly after the long winter months indoors. The other is that they are a necessity for special plantings such as rock gardens, for the front of the perennial borders, for walls and terraces, for special beds, edgings along walks and at the kitchen door steps. Dwarfs are always the intimate plants, the kind you want near where you can enjoy their dainty form and their ever-present fragrance.

THE MEDIAN IRIS

Earl Roberts

Median iris is the name given to the group of bearded irises that range in height from 10 to 28 inches. They comprise an amazing array of colors, sizes, and seasons for a wide variety of garden uses.

Each year new forms, new color combinations, and new patterns are appearing in the seedling patches of our hybridizers, mainly the result of combining the latest advances in the Tall Bearded irises with the best developments in species forms and in the new dwarf irises of all sizes and types.

Because of the great variation in size, season, and type among all these new medium-sized irises, they have been divided into four classes according to their garden uses. Each of these classes is considered as an entity with its own set of standards and its separate awards under the AIS system. The definitions heading the discussion of each class were written for the placques at the Presby Memorial Gardens.

Standard Dwarf Iris (SDB)

"The standard dwarfs are species and garden varieties from 10 to 15 inches in height, of varied characteristics and including all varieties of tall and dwarf parentage that have the height limits of this class. They generally bloom in the late dwarf season."

Species in this class are *I. aphylla, benacencis, hungarica, italica, olbiensis, subbiflora* and *virescens.* The class includes some of the taller chamaeirises, the aphyllas, and perhaps more importantly the Lilliputs, hybrids of the Tall Bearded irises with the species pumila. These are vigorous plants with charming flowers in a great variety of color and pattern combinations, presenting cushion-like mound of color when in bloom. By selective breeding the season for Standard Dwarfs is being extended both ways, so that some will bloom with the early dwarfs and some into Tall Bearded season. Eventually it will be possible to have a row of small cushion-type beauties to border the choice Tall Beardeds.

Some of the outstanding Standard Dwarfs are these:

Baria: light yellow with waved petals.
Brite: creamy white, good breeder.
Dale Dennis: plicata, white and orchid.
Garnet Treasure: wine-red bitone.
Lilliput: ruffled blue with darker spot.
Pagan Midget: purple self, blue beard.
Orange Bantam: deep orange self.
Green Spot: white with green spot on fall.
Little Shadow: deep blue-violet.
Pigmy Gold: deep velvety yellow.
Fairy Flax: very fine light blue.
Brassie: brilliant brass yellow.
Little Dogie: plicata, white stitched orchid.
Dancing Bee: lemon and light lavender.
Lilli-white: ruffled clean white.
Lilli-flora: lemon-ivory, fine shape.
Snow Elf: flaring ruffled white.

Intermediate Iris (IB)

"The Intermediates are hybrids of dwarf and Tall Bearded parentage or advanced generations thereof, from 15 to 28 inches in height, with erect branched stems usually taller than the leaves. They bloom between the Standard Dwarf and the Tall Bearded seasons."

This class includes the natural hybrids Albicans, Florentina, Germanica, Kashmiriana and Kochii, formerly considered as species. The well-known older named varieties of Intermediates were from crosses between Tall Bearded irises and garden chamaeirises. These are very vigorous plants, ordinarily quite sterile and restricted in coloring to purples, yellows, and whites.

The new Intermediates, particularly hybrids of Tall Bearded irises with the Lilliputs, are usually quite fertile and come in a greater array of colors and patterns with greatly improved flower form. They are very welcome for their lovely show before the earliest of the Tall Beardeds. Other new hybrids promise still greater diversity in this favorite class.

Some of the best of the new Intermediates are:

Aruba: yellow with rose falls.
Blue Asterisk: light blue with deeper spot on falls.
Cloud Fluff: wide ruffled white.
First Lilac: clean lilac-pink self.
Florinda: rich pansy-purple.
Pink Debut: tangerine-bearded pink.
Spring Prelude: bright yellow.
Kiss-Me-Kate: ivory-white with blue edge on falls.
Alien: novel blend of tan and blue with brown spot.

Miniature Tall Bearded (TABLE) Iris

"The Miniature Tall Bearded or Table iris are smaller diploid Tall Bearded iris from 15 to 28 inches in height with slender flexuous stems and flowers not over three inches in width. They generally bloom with the Tall Bearded iris."

The species in this class include *I. cengialti, illyrica, perrieri, reginae* (synonym), *rudskyi* and *variegata*. The Table irises are dainty and delightful irises that have long been famous as arrangement material for the lady of the house. Hybridizers have found it hard to improve on the old standard varieties, but gradually a few new colors are appearing. Among the older varieties are:

Bunting: medium blue with well-branched stems.
Daystar: white with orange-red beard.
Kinglet: golden yellow.
Mrs. Neubronner: light yellow, good branching.
Spring Sprite: pastel variegata, light yellow standards, pale blue falls.
Tom Tit: excellent dark blue-violet.
Two-for-Tea: orchid-pink.
Warbler: standard for the yellow class.
Widget: plicata, blue on white.
Kaleidoscope: yellow standards, falls variously splashed in red, unusual.

Among the more recent varieties in this class are:

Angelita: creamy white with blue stitching.
Desert Quail: cream with white spot on falls.
Quien Sabe: pale yellow with orchid.
Parakeet: amber and pastel violet.
Smarty Pants: yellow with falls veined red.

Border Bearded Iris

"The Border iris are diploid or tetraploid iris from 15 to 28 inches in height with stiffly erect branched stems and larger proportions than the Miniature Tall Bearded iris. They bloom with the Tall Bearded iris of which they are the shorter varieties."

Species in this class are *I. albertii*, Amas, *asiatica* (synonym), *imbricata*. It is only recently that a definite class has been recognized for these smaller Tall Bearded irises which have always been popular because of their obvious garden advantages. Such plants as the bright lavender-pink Pink Ruffles, the very clean white Priscilla, flaring blue Billet Doux, the smoky bicolor Pearl Cup, bright variegata Gay Hussar, and many of the shorter Tall Beardeds such as Black Forest, Paradise Pink, and Lights On remain favorites because of their useful shorter stature. For small gardens and for the open windy parts of the country they are most desirable.

Recently many very fine smaller plants are being selected for introduction from the seedling patches of Tall Bearded breeders. Some of these newer Border irises are:

Blue Shade: intense deep blue.
Frenchi: rosy bitone of fine form.
Little Gem: fine small tangerine-bearded pink.
Little Dude: ruffled white.
Smile Awhile: crisp flaring ruffled blue.
Toy Town: flaring medium blue self.
Yellow Dresden: lacy light yellow.
Yum-Yum: salmon pink, good form.

REBLOOMING OR REMONTANT IRIS

Edwin Rundlett

While not new to the iris world, the relatively few varieties of bearded iris that bloom more than once in a season, are receiving increased attention by breeders and gardeners. A rather large number of amateur iris breeders, linked through letter robins, are striving to do for the iris what rose breeders did for the rose.

In the early days most of the reblooming iris were the result of crossing dwarf iris with Talls, giving Intermediates having a wider climatic range than either parent. August Waves, Crimson King, Eleanor Roosevelt, Sangreal, and Southland are typical of these. Generally they are poor parents.

With the increasing preference for tall and large flowers, breeding attention switched to them. Line breeding, helped by good fertility and good germination gradually increased the percentage of seedlings that rebloom. At first the clarity of color was sacrificed, but colors are now being improved. Typical of the more dependable rebloomers for the colder climates are: Autumn Afternoon, Autumn Snowdrift, Autumn Sunset, Double Date, Fall Primrose, Gibson Girl, Guiding Star, Mishawaka, Polar King, and September Sparkler.

In the warmer parts of the Pacific Coast, of Arizona, New Mexico, and Texas and to a lesser extent eastward in the southern states, some Tall Bearded varieties such as Joseph's Mantle, Molten, and Savage will rebloom two or even three times a year approaching the ever-blooming goal set by some optimistic people. Oncobreds such as Ib-Mac, Jalla Effendi, Kalifa Baltis, and Moonchild also have this tendency in this area. Varieties that are more nearly evergreen, and with brighter colors, will rebloom here as nowhere else in this country; even standard Tall Bearded varieties, at times.

This brings into focus the fact that reblooming iris are very regional in their performance. The most dependable of them grow and increase very fast. To assure reblooming before autumn frosts it is important to keep them growing during the summer. Application of a good fertilizer such as 5-10-10 at the rate of one handful per clump raked into the soil in a ring around the plant about two weeks after spring bloom is recommended. Fertile soil, ample water, full sunlight, freedom from root competition and pest troubles are the essential requirements. But first an iris must have the proper genetic makeup.

Iris of typical Aril form and character

THE ARIL AND ARILBRED IRIS

Russell Hopson

From the Near East are imported the exotic Aril irises, which are one of the most spectacular members of the genus Iris. The Aril section includes three subsections—The Oncocyclii, the Regelias, and the Pseudoregelias. The Oncocyclus is of the greatest interest due to its large size, brilliant colorations, and vivid patterning of the flowers. The Regelias have similar coloration, but are smaller and have a vertical, oval-shaped flower. They are of interest to hybridizers because they cross readily with the Oncocyclii.

Since 1900 a considerable number of hybrids between Regelias and the Oncocyclii have been introduced to commerce, but it was not until after 1920 that adventurous hybridizers had much success with domesticizing the Oncocyclus into American gardens by crossing them with the Tall Bearded iris in an attempt to create garden-hardy hybrids which retained the beauty of the species. Californians have led the world in this endeavor and the names of William Mohr, Frank Reinelt, and Clarence G. White are well known for their successes.

The form is the most important feature of the Oncocyclus iris. The standards are almost circular, often strongly arched and cupped. The falls are also nearly circular and have an extremely broad haft. *I. nazarena, susiana*, and *lortetii* have hafts which are 3" wide. Some of the newest Arilbreds such as Trophy, Vio, and Appian Way have even wider hafts.

Another characteristic trait of the Oncos is a broad and diffuse beard. *I. gatesii* when well grown tops them all with a beard one and one-half inches wide and three inches long. In many cases the style arms are strongly arched and the crests extend beyond the standards in a novel way quite unlike any Tall Bearded iris.

The color of the Oncos is characterized by a bold pattern of decorative veining and dotting that is a feature of the species rather than the color itself. *I. susiana* is one of the best examples of this decorative dotting characteristic, while the Oncobreds Butterfly Wings (C. G. White '45) and its child Striped Butterfly (L. Noyd '58) are good examples of the decorative veining feature. Another important characteristic of the Oncos is a deeply colored signal patch on the falls. The most common color of the signal is black, but other colors such as crimson, yellow, cinnamon, brown, orange, and purple are becoming common. The stalk of the Oncos is straight and bears only one flower at its terminal. It ranges in height from about 6" to 24". Arilbreds developed from crossing Oncos with Tall Bearded have attained heights up to 40" or more and the stalks bear several flowers often with typical Onco form. Some of the more hardy varieties including the old and new are: Elmohr (Loomis '42), a mulberry-purple self; Lady Mohr (Salbach '44), a huge oyster white and lavender bicolor; Present (C. G. White '41), a white ground with dark orchid veining and deep violet signal; William Mohr (Mohr-Mitchell '25), a veined violet self; Butterfly Wings (C. G. White '45), oyster-shell blue with heavy brown veins on falls; Asoka of Nepal (C. G. White '50), mauve-olive blend with violet and wine russet veining; Heigho (Craig '49), clear blue-violet self with typical Onco veining and form; Frances Craig (Craig '52), very smooth pearly lilac-blue self with hints of the Onco form without the veining; Black Joppa (C. G. White '53), a violet blend heavily veined in prune-purple and Spanish raisin; Kalifa Gulnare (C. G. White '54), pale lavender standards, rose falls with deeper signal and gold edge; Imam Salah (C. G. White '55), sulphur yellow with amber overtones and deep purple signal; Nomohr (Gibson '55), rich bamboo-cream self with a few violet veins; Appian Way (Plough '58), phlox-purple self with deeper violet veining; Golden Joppa (Linse '58), yellow amoena in Onco form; Trophy (Linse '58), lobelia blue with Onco veining and blue beard.

The Regelias are quite different from the Oncos as they have a long form of standards and falls which sometimes touch at the top giving the appearance of a cathedral. The three basic forms of Regelias are *I. korolkowi, hoogiana*, and *stolonifera*. Two Regelia hybrids developed from crossing these species, Lucia and Vulcanus, are noted for their blue beards. The stalk of the Regelias is from fourteen to twenty-eight inches in height, straight with two buds and rarely three.

The culture of the Arils is a little different from Tall Bearded iris because they prefer lots of lime, and very dry summers. Good drainage is essential. In areas with summer rains it is advisable to lift the rhizome and store in a cool, dry place from right after bloom until late in October.

The Aril Society International is a group of people throughout the world who are devoted to the study, cultivation, and hybridization of Aril iris. Increased interest due to more common use of embryo-culture on difficult germinating seeds, and closer ties between iris growers make for a bright future.

SPURIAS—IRIS FOR EVERY GARDENER

Ila Nunn

No iris gardener should fail to grow the strikingly beautiful Spuria iris, a beardless rhizomatous type originating in Southern Europe and Asia. The sturdy, erect fans of narrow, swordlike leaves with flower stalks 12 to 18 inches taller than the foliage, sometimes reaching a height of 5 feet or more and bearing six to eight paired flowers, make these iris excellent for background plantings. Crisp, erect or slightly flaring standards and well-rounded falls of good substance and fine texture surprisingly resistant to wind and rain, distinguish these among all iris both for garden display and for cutting.

Colors in this group range from white through creams and yellows, light and bronze browns to chocolate, all tints and shades of blue and combinations of all these, some veined, some with conspicuous yellow signal patch. The newer hybrids are breath-takingly beautiful both in color and size with broad, frilled or tailored standards and falls, the latter gracefully curled under or flaring, never limp or drooping.

Spurias should be planted in the fall, late in mild climates. They like open, well-drained beds of neutral soil with plenty of sun and water in the growing season, and can stand a rich fare of humus and well-balanced plant food. In cold weather manures and stable sweepings can be used as a mulch. Bone meal and rock phosphate are excellent in soils which leach out easily from excessive rainfall.

Plant rhizomes high so that only about ½ inch of soil is covering them, adding more for winter protection, 2 to 3 feet apart. A well-established clump will reach a three-foot diameter in three years with as many as thirty bloomstalks. These iris do not like to be disturbed, do best when left in one spot from year to year without dividing, unless there is evident overcrowding. Fertilizers can be worked into the soil well away from the rhizome in early fall and spring, and also immediately after bloom stalks are cut away and the plant begins to "go off."

This is a critical time for these iris as a combination of heat and humidity favorable to a soil-borne bacteria may cause a mustard-seed fungus on the plant at the soil level which progresses into a rhizome rot. At first onset soil should be removed from the surface of the rhizome at the growing end, exposing it to sunlight and air, and an antiseptic solution of potassium permanganate, 1 tsp. per gallon, or formaldehyde, 1 tbsp. per gallon, doused on the affected part.

Spurias are the most adaptable of all iris to variations of climate and altitude, growing well in the humid heat and mild winters of the Gulf Coast, the dry heat and cold of desert lands, and equally well in colder climates and higher altitudes, as far north as New England and Canada.

Some of the better varieties that can be recommended for the beginning gardener are: White Heron, Wadi Zem Zem, Lark Song, Dutch Defiance, Sunny Day, and Golden Nugget. Later introductions than these that are proving good garden iris are Fairy Lantern, Morningtide, Black Point, and Royal Toga.

HOW TO SUCCEED WITH JAPANESE IRIS

Eleanor Westmeyer

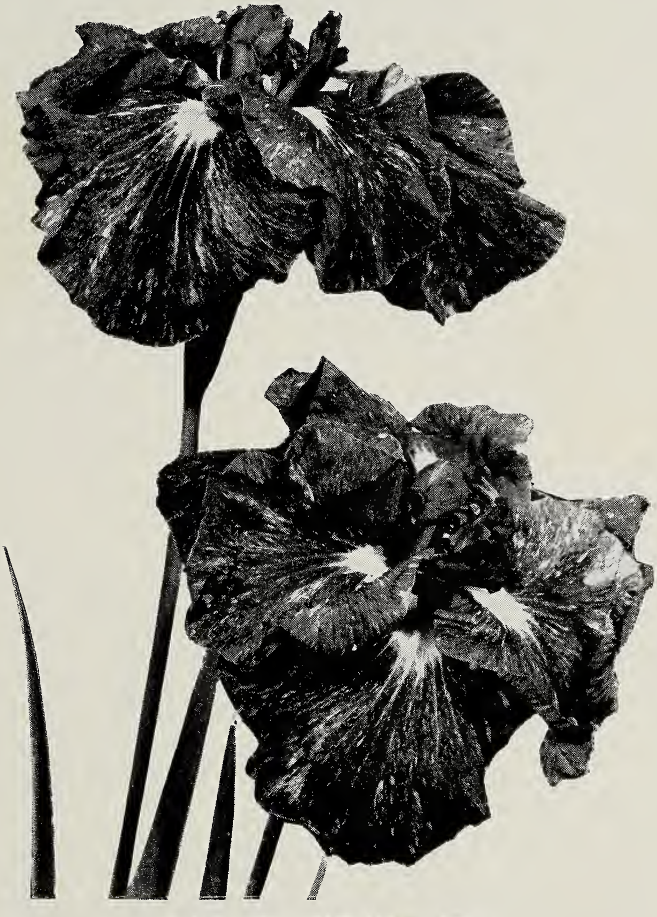
The spectacular 6-to 12-inch, saucer-like blossoms of the Japanese iris, which open shortly after the Tall Bearded iris season ends, make this iris well worth special attention to simple growing needs.

Selection of Varieties

The imported Higo strain produces larger flowers with heavier substance than the more common types. Varieties bred in the United States by W. A. Payne and Walter Marx from imported Higos offer many improvements in color, branching, form, and substance. Colors range from pale lavender-pinks to deep purple with variations of pattern supplied by contrasting veining and styles. There are 3-petaled singles, flat-topped doubles and draped triple-petaled varieties. The following named varieties are recommended: blue—Fashion Model, Blue Lagoon, Irojiman, Margaret Hendrickson; pink—Prima Ballerina, Danseuse, Pink Triumph, World's Delight; deep purple—Imperial Robe, Summer Storm, Cobra Dancer; rose—Confetti Shower, Rose Tower; red —Fiery Steed, The Great Mogul, Imperial Palace; lavender—Princess Aurora, Magic Lantern; violet—Woodland Brook, Violet Lustre, Shadow Play; white—Snowy Hills, Miss Simplicity, Ivory Glow and Iso-No-Kamone; novelties—Scherzo (marbled), Naturodati (peony-type double), Swirling Waves, Pin Stripe (dark-veined), Pillar of Fire, Frilled Enchantment, Torizan (bordered), Hoyden (bi-color). Fresh Higo seed, when available, produces an interesting array of flowers.

Soil Requirements

First requirement is an acid soil, free from lime which is fatal to Japanese iris. If your entire garden has been limed, it would be wise to dig out a special bed for these irises and replace the soil with rich humus. Liberal applications of peat and manure will help to condition the bed. A neutral soil may be made more acid by adding aluminum sulfate or sulphur. One to 2 lbs. of sulphur to 100 sq. ft. are needed to lower the soil each pH.



DIAMOND NIGHT (Marx, 1957)
Marbled blue double Japanese iris

Planting, Pampering, and Protecting

In Japan these irises are grown in former rice paddies so that they can be flooded during their growing season. It is unfortunate though, that this type of culture has given the impression that Japanese iris are bog plants, for they will thrive under ordinary garden conditions if well drained while dormant. Planting may be done in early spring or late fall. In cold regions, spring planting is advisable as this allows time for plants to become established before the winter. All plants should be protected the first winter with a loose covering such as pine needles, excelsior, or ground corn cobs. The crown of the plant should be set two inches below the surface of the soil. Allow 2 to 3 feet between plants, if possible, as the clumps grow rapidly the second year. Japanese irises are heavy feeders. A year-round mulch of manure and leaf mold or pine needles is helpful. Fish emulsion and balanced fertilizers may be used—but avoid bonemeal because of its lime content. Extra watering or flooding prior to blooming will improve size and color of the blossoms.

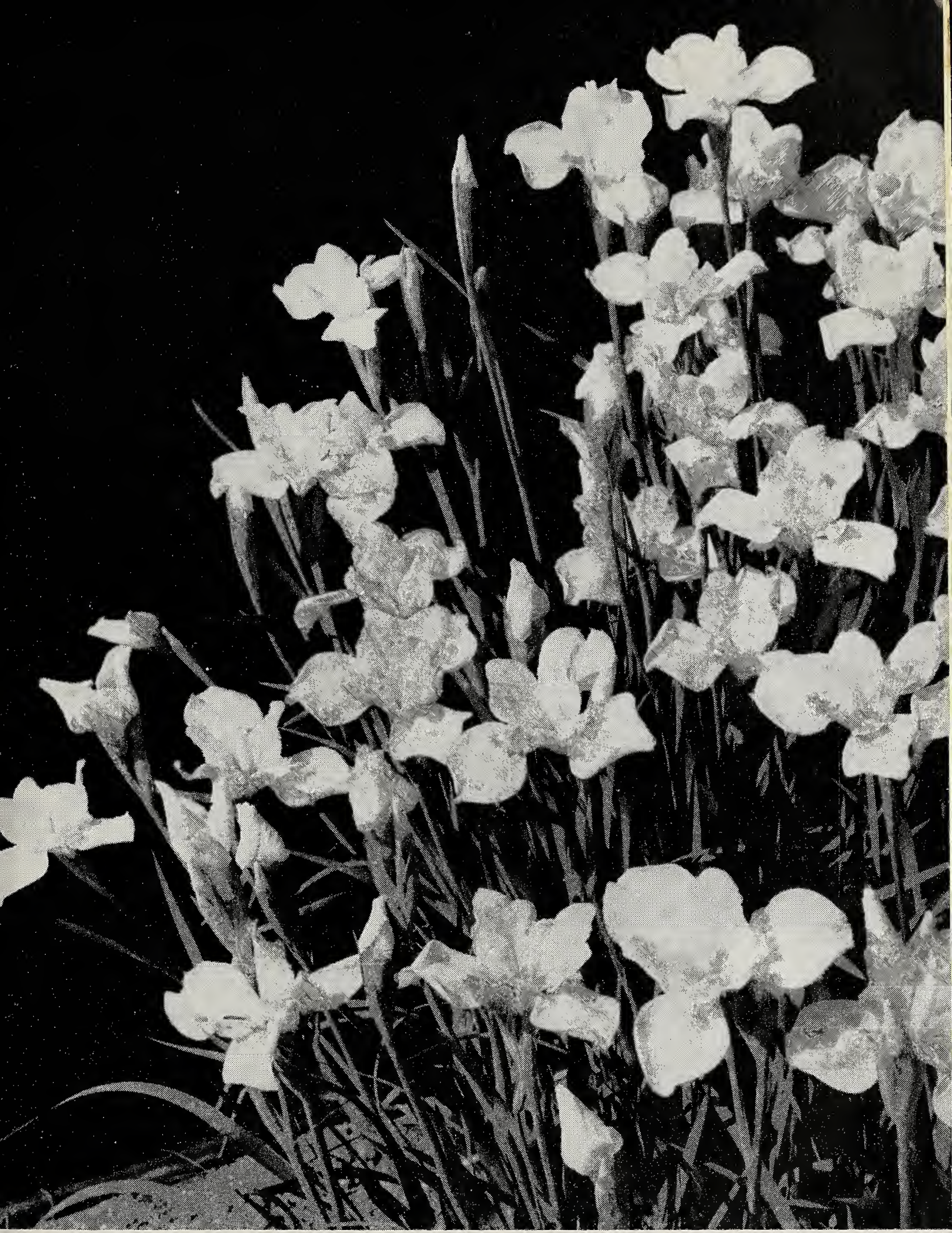
A chlordane drenching in early spring or late fall helps to prevent borers. Regular spraying with DDT is advised. Since wheat rust will attack these irises, it is best to prevent the disease by avoiding the use of a straw mulch which may serve as a carrier and by cleaning out and burning dead foliage.

THE SIBERIAN IRISES

Margaret Edwards

The Siberian group contains perhaps the daintiest and most graceful flowers in the genus Iris. Blossoms averaging two to three inches across perch on top of thin wiry stems, usually well above slender grassy foliage. Height depends on the variety, some being as small as eight inches, some as tall as four feet. Those most commonly seen are garden hybrids of *I. sibirica* and *I. sanguinea* (orientalis), in white, blues, lavenders, violet, and red-violet; the whites with a yellow spear on the falls; the colored ones running from almost pure selfs to heavily marked falls. In some, the standards and style arms may vary in color from that of the falls. Foliage runs from grass green to blue green, sometimes tinged red. They are very hardy, some of the finest varieties being bred in Canada, but are not too happy in the southern part of the temperate zone. They require full sun, mildly acid fertile soil, and like considerable moisture especially in spring and summer though they can tolerate ordinary garden conditions. New plants take two or three years to establish themselves in good clumps, but thereafter bloom will be generous and plants may remain undisturbed for ten years or more.

Lesser known members of the group, but lovely things where they can be grown, are the species *I. chrysographes*, velvety red-purple marked with gold, and its many natural varieties; *I. forrestii* and *I. wilsonii,* smaller, yellow-flowered, and somewhat tender; *I. delavayi*, blue- or red-purple, particularly tall and strong needing more moisture than



WHITE SWIRL (CASSEBEER) IS A SIBERIAN WITH UNUSUAL FORM

the others, and the hybrids, Chrysofor, Hargot Holmes, and Chrysowegii, the last two being hybrids with members of the California group.

BARBARA NELSON

LOUISIANA IRISES

Charles Arny

Today most Louisiana iris are hybrids. That is, they are the product of blending of various species of the group of beardless iris known as Louisiana iris. The modern Louisiana iris is a much more adaptable garden plant than its parents. The newer varieties have improved features such as increased flower size, greater velvetiness in flower texture, more variation in color shades and tones, and a great deal more substance. These qualities, together with increased adaptability to upland or bed culture, make the Louisiana iris a plant of increasing interest to flower lovers.

The modern Louisiana iris is the progeny of four types of iris known as: *Iris fulva, giganticaerulea, brevicaulis,* and a giant fulva-type of iris referred to as Abbeville fulva.

The fulva iris has many flowers borne on rather straight 30-inch stems, usually small, rusty red or copper colored with all floral parts drooping.

The *giganticaerulea* are the giants of the Louisiana family, sometimes five feet; flowers are large, five-to seven-inch spread, usually blue and white. These flowers have sepals or falls held horizontally with the petals or standards vertical.

The *brevicaulis* are the dwarfs or babies. Their flowers are of medium size, three to four inches across, with a great deal of substance, and are usually colored blue and white. The flowers are borne on a zigzag or straight stem below the top level of the plant foliage. These iris are upland iris found natively out of water.

The Abbevilles or giant fulva are for the most part giant reds, but yellow shades are found. The rather flat full flowers of these giants often have thick, leathery, overlapping petals and sepals with varying signal patches. Many blooms have excellent substance and occasionally have a crepy or velvety texture. The growth height of these iris is usually about three feet. These iris frequently have branched flower stems that extend well above the foliage height. Two flower buds are found at each flower position. The rhizomes are large in size and at times as long as a foot.

The *virginicas* are another species of beardless iris found in Louisiana, but have played no part in the development of the present-day hybrids.

These iris are noted for their exceptional foliage which has a very pronounced midrib. The flowers are generally blue and white, heavily veined with a sort of flaring form. Flowers tend to be small and have less substance than those of our other iris. Growth height is about 3 feet, although many do not exceed two feet.

There is great variation in color and flower form in the hybrid Louisianas.

The signal patches range from the fine line to the radial form. Crest or signal colors found are yellow, orange, and green.

Louisiana iris are very adaptable to most soils. These iris are heavy feeders and love moist conditions. It will prove most rewarding to provide an abundance of organic matter in the beds where these plants are used. But any flower bed that is suitable for growing other garden perennials is satisfactory for growing Louisiana iris. Outside of the South and California, it is probably best to plant in late summer or very early fall.

Place iris rhizomes in your flower bed so that the terminal shoots face the direction in which you want them to grow. The rhizomes should be set deep enough to be covered with not more than about 1 and ½ inches of soil after the bed has settled. Space rhizomes 10 to 18 inches apart where planted with the idea of leaving in place for more than a year.

After planting rhizomes, cover with 4 to 6 inches of mulch of some sort. This heavy mulching should be particularly important in northern states with severe freezing and thawing.

Just before spring growth begins a very light application of superphosphate should be applied.

If possible locate the iris planting where it will receive at least a half day of sunshine.

Rust is almost the only serious disease one experiences with the Louisiana iris. No positive control is known, though spraying with wettable sulphur helps. Start spraying just before spring growth begins and repeat once a week using 1-2 pounds of wettable sulphur to 50 gallons of water with enough of some commercial detergent to make spray sticky. (2-3 tablespoons of sulphur to a gallon of water, plus 2-3 tablespoons of sulphur to a gallon of water plus 2-3 tablespoons of detergent.) Prompt removal of old diseased foliage and avoiding overhead watering also helps.

The insect doing the most damage to these iris is probably the leaf miner. It is difficult to control because it works inside the cell layers of the leaf blades close to rhizomes. Some control may be obtained by spraying with water solution of lindane powder every 10 days for a month beginning with fall growth.

Some of the more dependable Louisiana iris varieties by color are as follows:

White—Barbara Elaine Taylor, Her Highness, June Clouds, Cameron White, Bette Lee
Blue—Blue Chip*, Flat Top, Puttytat, Holley Blue, Ruth Holleyman, Storm Signal, Blue Sunset
Yellow—Dixie Debutante, Strutting Canary, Butter Brickel, Helen Smith, Delta Country, Sunlit Fields
Lavender—Louise Arny, Mistis, Barbara Nelson, Dora Dey
Purple—The Khan, Violet Ray*, Royal Velour, Joe Mac, Beau Geste
Rose-Magenta—Peggy Mac, Sarah Gladney, W. B. MacMillan
Pink—Easter Surprise, Kissie, Joy Roberts, Locket's Luck, Bayou Sunset*
Red—Cherry Bounce*, Royal Gem, Cattee, Chuck, Wheelhorse*
Bitones—Bayou Glory, Captain Bill, Caroginia, Joyce

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* Varieties having received the Mary Swords Debaillon Award

OUR NATIVE AMERICAN IRIS

B. Leroy Davidson

The American species of iris come in many colors, varying from a few inches to several feet in stature. Because they grow naturally in a great variety of soils and climates, there are some suitable to every garden. Understanding the natural situation of each is the best way to assure success in growing them.

There are no bearded or bulbous natives; their beardlessness and distribution-pattern relate them more nearly to the Asian Apogons than to any others. *I. setosa* is the one species to occur naturally in both the old and new world, usually near the sea, from Kamchatka, the Aleutians and Alaska; and a small form called variety Canadensis separated by the glaciation, is found in the St. Lawrence and the Maritime Provinces of E. Canada and coastal New England. *I. setosa* is distinguished by its very short standards. *Iris versicolor* and *virginica,* two similar species in both appearance and requirements, often confused in nature, spread over the lowland E. North America from Hudson's Bay to the Gulf Coast. *I. versicolor* is northern, from the Great Lakes area north, west, and east (somewhat overlapping Canadensis) to coastal New England and south to Pennsylvania. *I. virginica* occupies the Mississippi Valley (in its variety *shrevei*) and the SE coastal plain to the Virginia coast. *Iris tridentata,* the southern ally of *setosa,* alike in short standards, is found from the Virginia coast to the swamps of Carolina and N. Florida.

Together these form a closely related group and hybrids are known where two are growing together. They alike present a strong resemblance to the Gulf Coast *I. hexagona* (discussed under Louisianas) and like similar treatment, variability in frost tolerance influencing garden performance; the *hexagonae, tridentata* and *virginica,* being of southern occurrence, are damaged by frost and react to warmth. All belie their love for moisture by the telltale "water-marks," i.e., short, blackish, transverse veins connecting the strong main parallel veins of the soft deciduous leaves; and they will tolerate more standing water than other irises except the related yellow European *I. pseudacorus* which is found naturalized in many wet places in America, appearing as a native. The usual place for all of them in the garden is the sunny waterside or bog or in ponds or pools. All except the naturalized immigrant come in light-to dark blue-purple, rarely white. Soil must be high in humus content.

The Western American irises differ in their tough firm leaves, many of them evergreen, and in general intolerance of excess water. They are roughly divided geographically by the Cascade-Sierra Nevada mountain chain into two natural groups, the Longipetalae and the Californicae. Of the former, *I. missouriensis*, although found in a few remotely scattered colonies westerly, is mainly a species of the easterly Basin and Plains states and throughout the Rockies. In general it is confined to the arid atmosphere in heavy meadow soils plentiful in moisture in spring but drying completely by late summer, where its blue-purple turns acres to color at bloom time. It is frost resistant. A close ally, the very similar *I. longipetala,* found only about the Bay area of central California, is intolerant of frost. The Californicae or Pacific Coast irises on the other hand, never found east of the mountains, consist of ten closely allied species, five subspecies, and numerous intergrades where two of them grow together. *Iris douglasiana,* singular among them for its branched stem, is found only close to the sea, and is more tolerant of water than the others which insist on perfect drainage at all times. It and *I. munzii,* which is found in nearest to true blue, are alike in liking warmth and in sensitivity to frost. *Iris tenax, bracteata, innominata, chrysophylla,* and *hartwegii* are most resistant to cold. *Iris tenuissima* and *chrysophylla* are usually narrow-petaled and almost white, the latter stemless or nearly so, with long tube. *Iris fernaldii* is valued for its strongly erect stem, much more so than most. *Iris purdyi* has lovely form of its flowers, as has *bracteata,* the only one found only in yellow. Most of them are extremely variable and come in many colors. *Iris macrosiphon* is particularly variable, is another of the nearly stemless with long tube. Gardeners should attempt to know the bloodlines of hybrid strains as a clue to culture. Found naturally in the sunny openings of coniferous forests in well-drained, often gravelly, soils that are neutral to acid, they never like much shade.

Five other natives belong to independent groups; *I. cristata* and *lacustris* of the Evansia (Crested) irises are found in the Appalachian-Ozark landmass, the latter about the Great Lakes and into Canada, in leaf mold under deciduous hardwoods and are themselves deciduous, stoloniferous, about six inches in height, light- to dark blue-purple or rarely white. The similar stoloniferous little *tenuis* with a taller deeply branched stem of a few small, paler, crestless flowers comes from a small area in NW Oregon, belongs by itself to the third group, Oregonae, and will grow in rather heavy shade. Found roughly in the same general area as *cristata,* but only in very acid soils, is the stemless and crestless, evergreen *varna,* in similar colors, both with brilliant yellow signals. It belongs by itself to the third group, Vernae, and has the long tube of the stemless irises. The foregoing four are alike in preferring moist cool humus soil and light shade. The slender, blue *prismatica* belongs alone to the fourth group, Prismaticae, once considered with Sibiricae. It succeeds well with Siberian culture, differs in its short stolons, and is found in nature in open meadowland from New England to the Cumberland Plateau of east Tennessee.

There are few troubles or diseases to beset the species in gardens unless they are unsuitably placed, as with too much shade or too much water, in which case one of the types of rot attacking bearded iris may be induced. A thriftily growing plant is ordinarily very healthy Rust will attack the Longipetalae in some areas; control is as for rust on Japanese irises.

It is thus seen that our native flora provides a wealth of irises for our gardens from among the twenty-four native species. We should perpetuate the best of these, for unfortunately many are becoming fewer in nature, and from our work will come the best for the gardens of the future.

HOW NEW VARIETIES ARE CREATED

Now that you are acquainted with some of the many different kinds of iris, you may wonder how they are created. There are over 30,000 named varieties. These varieties were created by cross-fertilization between already existing varieties.

Selection of Parents

It is best to start hybridizing by selecting two varieties of similar or closely related colors. Try to have some long-range objective in view such as improved form, height, branching, early bloom, better color, or any combination of these, and visualize what the best characteristics of each parent might bring. Later you can try wider crosses of different characteristics once in a while, but chances of success are generally much less.

Pollenization

Deep in the flower is the pollen-bearing anther, (See drawing on page 16.) Remove it with a pair of tweezers and carry it to the flower selected as the seed parent. Opposite each fall, above the beard on a bearded iris, is a style arm and just below the crest of the style arm is a small lip. Rub the pollen on this lip. Do this on a warm dry day as results are doubtful on wet cold days. Within a few days the ovary, which lies below the blossom, will begin to swell if your cross is successful. If so strip off from the stalk any leaves to prevent moisture from causing the stalk to rot before the seeds are ripe. Be sure to tag the blossom as soon as you pollinate it, put a number on the tag, and record the cross in a notebook under number. About seven weeks later the pod will be ripe and begin to split open. At this time remove the seeds and place them in a cool spot to dry. Be sure to keep the numbered tag with them. Some prefer to plant the fresh seed soon after harvesting, but this may lead to early germination and loss in winter unless protection is given. Most prefer to store seed until late fall, then plant the seed in rows in the open or in a cold frame one inch apart and ¾″ deep. They will germinate the following spring.

Care of Seedlings

When the seedlings are about three inches tall they should be transplanted to rows where they are to bloom. Damage the roots as little as possible and leave the seed attached if you find it there. They will grow rapidly, and with good care many will bloom the following spring. When your seedlings bloom you must go through the row and ruthlessly discard all which are not superior to existing varieties in some respects. The first year may not be typical bloom and you may hold over a number for study the next year. Those you keep should be numbered for later identification.

Naming and Registration

If you have created a seedling worthy of a name instead of a number, how do you proceed? Write to the AIS Registrar for Registration forms. Remit $2 for each form requested. There is no limit to the number of irises that may be registered in a year, but all registrations over ten, regardless of classification, will require a fee of $4 each. When sending in the form, be sure to include several alternate names for each iris in order of preference. Names of persons must be accompanied by permission in writing from the individual so honored. The nearest of kin's permission must accompany application for the name of a deceased person. Use of trademarks or copyrighted names are not allowed. Give accurate color description and use color symbols if possible or identify by Color chart. An iris must be registered by July 10 to be eligible for an AIS H.M. award in that year.

ACKNOWLEDGEMENT

Although much of the material in this booklet has appeared in the previous edition, or in the *Bulletin of the American Iris Society,* there is a great deal of new information that has been added, for this publication.

Mr. Edwin Rundlett and Mr. Harold Knowlton have contributed much to the text as well as money and helpful suggestions. Messrs. Walker, Benson, and Douglas particularly and all the AIS Committee Chairmen have helped with the various sections which deal with their particular responsibility. Others have helped directly or indirectly with suggestions which were most useful.

Messrs. Gordon Plough, Charles Arny, Walter Welch, Al Lauck, and Fred Cassebeer contributed excellent photographs.

If you have any constructive criticisms to offer for improvement of future editions of this publication, they will be welcomed.

It is hoped that this edition will be helpful to all AIS members, old and new, in providing an inexpensive source of basic information on the Society and the iris genus, and encouraging further activity in the areas of particular interest. Additional copies may be purchased at 50 cents each from the American Iris Society, 2237 Tower Grove Boulevard, St. Louis 10, Missouri.

Harry B. Kuesel
Glen Head, New York

May, 1959

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